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TITLE OF THESIS...A COMPARISON OF SOME ASPECTS
OF BUSINESS EDUCATION IN SMALL,
MEDIUM AND LARGE HIGH SCHOOLS OF ALBERTA

UNIVERSITY.....ALBERTA

DEGREE FOR WHICH THESIS WAS PRESENTED...M.ED.

YEAR THIS DEGREE GRANTED...FALL, 1973

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THE UNIVERSITY OF ALBERTA

A COMPARISON OF SOME ASPECTS OF BUSINESS EDUCATION IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS OF ALBERTA

BY

©

JAMES D. QUARSHIE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION

DEPARTMENT OF SECONDARY EDUCATION

EDMONTON, ALBERTA, CANADA

FALL, 1973

UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled Comparison of Some Aspects of Business Education In Small, Medium and Large High Schools of Alberta submitted by James D. Quarshie in partial fulfilment of the requirements for the degree of Master of Education

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Date: August 1, 1973

ABSTRACT

The purpose of the present study was to determine the differences existing among small, medium and large high schools in terms of the following aspects of business education: proportion of students enrolled, purposes, curriculum, equipment and facilities, guidance, community relations, teacher qualifications and experience, and related problems.

A total of seventeen principals, seventeen heads of business departments and sixty-four business teachers from six small high schools, six medium high schools and five large high schools participated in the study. Data for the study were gathered through interviews with the participants.

The findings indicated that small high schools had the greatest proportion of students enrolled in business courses while large high schools had the smallest proportion of students enrolled in business courses. The proportion of girls enrolled in business courses was higher than the proportion of boys enrolled in business courses in all three sizes of high schools.

The most frequently identified purposes in all high schools were vocational training, and one or more of the following purposes: provision of personal use skills, provision of additional options in the high school program and provision of general education.

The most frequently offered courses in all three sizes of high schools were: Typewriting 10, 20 and 30 and Accounting 10. Large high schools offered the greatest variety of business courses.

On equipment and facilities, it was found that large high

schools had the greatest variety of instructional machines while small high schools had the least variety of instructional machines. Responses from principals and heads of business departments indicated that small high schools had the most limited library facilities.

Few small high schools but many medium and large high schools had guidance departments. However, the majority of respondents in all the high schools rated their guidance and counselling services to business students as effective.

The majority of the high schools, irrespective of size, were involved with the community through work experience. Involvement through other means was, however, limited.

In terms of business education qualifications, large high schools had the greatest proportion of well-qualified business teachers, whereas small high schools had the least proportion of well-qualified business teachers. The majority of business teachers in all high schools had had five or more years of teaching experience and one or more years of occupational experience.

Problems most frequently identified varied with the size of high school. In small high schools the most frequently identified problem was the lack of student enrollment in business courses; in medium high schools the most frequently identified problem was lack of equipment and facilities while in large high schools no single problem was identified in two or more schools.

ACKNOWLEDGEMENTS

The completion of a study like the present one requiring the co-operation of many individuals cannot be attributed to the efforts of the writer alone. The writer therefore wishes to express his gratitude to the superintendents, the principals, the heads of the business departments and the business teachers of the high schools included in the study for their co-operation.

The writer wishes to express his appreciation to Dr. Geraldine Farmer, chairman of the thesis committee for her guidance and assistance in the course of the thesis.

To Dr. H.T. Sparby, Professor Emeritus of the Department of Educational Administration, the writer extends his appreciation for his assistance in the initial stages of the thesis and also for his role as a member of the thesis committee. To Dr. H.J. Kass and Dr. J.E. Robertson, the other members of the thesis committee, the writer further expresses his appreciation for sacrificing their time in order to sit on the committee, and for their useful suggestions.

To his typist, Miss Harriet Schryver, the writer extends his appreciation for her patience and hard work in typing the thesis.

To friends, especially, Maureen and Don McKen, and Frank Arthur, the writer extends his gratitude for their encouragement and understanding in the course of the thesis.

Last, but not the least, the writer extends ~~his~~ appreciation to C.I.D.A. for providing the funds for the thesis.

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CHAPTER I

THE PROBLEM

STATEMENT OF THE PROBLEM

Schools of all sizes -- ranging from the small village schools to the large city composite schools -- offer business courses. Do practices and facilities in business education differ from one school size to another and, if so, in what ways do they differ? In Alberta, no prior study has been done to provide this information.

It was the purpose of this study to examine business education in the different sizes of high schools in Alberta to determine what differences exist in business education among small, medium and large high schools in terms of proportion of students enrolled in business courses and programs; purposes; curriculum; equipment and facilities; guidance, counselling and job placement; community relations; teacher qualifications and experience and special problems.

To achieve this purpose, data were gathered to answer the following specific questions: What differences, if any, exist among small, medium and large high schools in terms of:

1. (a) the proportion of students enrolled in business courses?
    (b) the proportion of boys enrolled in business courses?
    (c) the proportion of girls enrolled in business courses?
    (d) the proportion of business students enrolled in one, two, three or more business courses?
2. the purposes of business education as perceived by principals and heads of business departments?
3. (a) the business courses and programs offered?
    (b) changes in business courses and programs within the last year?

4. (a) the availability of equipment and facilities and their maintenance?
   (b) library facilities?
5. (a) counselling services extended to business students?
   (b) job placement services to business students?
   (c) follow-up studies of business graduates?
6. the business education department's relationship to the immediate community?
7. (a) business teachers' qualifications?
   (b) business teachers' teaching experience?
   (c) business teachers' occupational experience?
8. problems related to the aforementioned aspects of business education?

IMPORTANCE OF THE STUDY

A study of this nature is of significance to the future of education in general and to business education in particular. Education since World War II has been an expanding enterprise; student population has increased tremendously bringing in students of diversified background. This phenomenon coupled with changing ideas on the purpose of education from satisfying the needs of selected few to meeting the needs of all youth of this age has resulted in the expansion of courses offered in the school. This expansion in course offerings in the school makes it necessary for educators to assess, periodically, the different aspects of education in order to determine whether they are achieving what they purport to achieve. Such assessment would be difficult, if not impossible, if practices prior to such assessments were not documented. This study will add to the information needed for assessing business education in the senior high schools.

For innovative purposes, the study becomes very valuable. Carlson and others (1965) point out that one of the barriers to innovations in education generally is weak knowledge base, that is, lack of practical research. Business education is no exception to this charge. The present study contributes towards the store of knowledge base needed for innovations. The study will thus serve as guidelines for improvements where necessary.

The study would also be helpful to existing schools offering business programs and courses because they can compare their practices with other schools with approximate conditions so as to improve their own business courses or programs.

School boards could also benefit from the study by utilizing its findings when estimating the amount of space, equipment, facilities and personnel to be devoted to business departments in new schools.

Curriculum builders would also benefit from the study since it could serve as reference material for curriculum development in business education.

With the documentation of the practices in business education among the different sizes of high schools, prospective teachers will be in a better position to know what to expect of the schools in which they will be teaching. Teachers in preparation and practising teachers will thus find the study beneficial.

Above all, developing nations of the world planning to embark on business programs in their high schools could utilize the findings of the study as guidelines when establishing business programs in different sizes of high schools.

DEFINITION OF TERMS

For the purpose of this study, the following terms have been defined:

Business Education: That aspect of education which provides the student with courses in business related subjects.

High School: Grades ten through twelve of the Alberta School System with at least one teacher per grade.

Program: Interrelated courses of study in a specific subject area.

Business Teacher: A teacher who teaches one or more business courses.

Business Student: Any student taking one or more business courses. It should be noted that in the high school, students are not registered in any one particular department and thus no one department claims any group of students.

High School Size: For the purpose of this study, the following definitions apply to school sizes:

Small high school: A high school with an enrollment of 299 or fewer students.

Medium high school: A high school with enrollment of 300-499 students and

Large high school: A high school with enrollment of 500 or more students.

Enrollments of the 1971-72 academic year sent to the Department of Education by the principals of the schools were used in determining the sizes of the three categories of schools.

Curriculum: Used in a very restricted sense in this study to cover courses and programs offered in a school.

Guidance Department: A separate department in the high school staffed with at least one professional guidance counsellor whose function in the school is to provide counselling services to students.

Counselling Services: Advice to students on programs, courses, and social and psychological problems.

Vocational Counselling: Advice to students on job opportunities.

Professional Certificate: A teachers' certificate awarded to holders of Interim Professional Certificate after two years of successful teaching or related professional experience in schools or school systems making use of the Alberta program of studies.

Interim Professional Certificate: A teachers' certificate awarded to candidates entering a Faculty of Education in any of the Universities in Alberta after September 1st, 1968 upon completing the four year Bachelor of Education (B.Ed.) degree program; or in the case of holders of approved degrees after one year of studies in a Faculty of Education in any of the Universities in Alberta.

Provisional Certificate: A teachers' certificate awarded to candidates entering a Faculty of Education in any of the Universities in Alberta after September 1st, 1968 upon completing the first three years of the Bachelor of Education (B.Ed.) program. The certificate is valid for three years after which time it could be renewed on yearly basis for a further three-year period. The renewal is granted on the provision that:

(i) The holder shows evidence of having completed further work towards the next stage of certificate and

(ii) the holder is recommended by a person acceptable to the Minister of Education on the basis of the holder's successful teaching experience.

The certificate could not be made permanent.

All students entering the Faculty of Education in any of the Universities in Alberta in September 1973 or later, in order to qualify for the Provisional Certificate have to:

(i) complete the four year Bachelor of Education (B.Ed.) program OR

(ii) complete the Professional Diploma Program in the case of holders of approved degree(s)

before they could be recommended to the Department of Education for a teacher's certificate.

First Class Certificate: A teacher's certificate awarded to candidates with the Alberta Senior Matriculation plus at least one year of Normal School training.

High School Certificate: A teacher's certificate awarded to candidates with University degree(s) plus at least one year's study in a

College of Education.

Standard 'S' Certificate: A teacher's certificate awarded to candidates who had completed at least two years of the Bachelor of Education (B.Ed.) in Secondary Education degree.

Junior 'E' Certificate: A teacher's certificate awarded to candidates with the Alberta Senior Matriculation plus at least one year of education at either a Normal School or University.

LIMITATIONS OF THE STUDY

The following limitations are placed on the study:

1. The study was restricted to the following three cities and their surrounding areas of Alberta: Lethbridge, Calgary and Edmonton.
2. The study did not deal with subject matter content, or instructional methods utilized by business teachers.
3. No attempt was made to evaluate business education per se. The study was only descriptive in nature and presents only the state of business education in the high schools as it existed at the time of the investigation.
4. For the purposes of student enrollment and curriculum, except in one school where data for the year were used, only data for the first semester were used because:
    (a) All the schools in the study, except one, were on a semester basis.
    (b) Students registering for second semester courses could decide not to take them as a result of not satisfying the necessary prerequisites or by changing their minds.

(c) Courses planned by the school for the second semester might not be offered because of lack of enrollment or lack of teaching personnel.

(d) Some schools in the study did not have data on student enrollment and course offerings for the second semester.

CHAPTER II

REVIEW OF RELATED LITERATURE

A review of the literature in business education reveals that though much research has been done in specific instructional subject areas such as Typewriting, Shorthand and Bookkeeping, not much has been done in the area of general business education. This observation is also evidenced by the study made by Farmer (1968) to determine the amount of research done in business education in the period 1963-68. An attempt has been made to review all the related Canadian studies; however, use was also made of the available United States' studies.

Student Enrollment in Business Education

In an attempt to evaluate business education programs, Wheeless (1964) studied twenty-three public secondary schools of Northwest Arkansas. From an interview with business teachers of the twenty-three schools, she found the following in terms of the proportion of students enrolled in business courses in small, medium and large high schools:

> Comparison of business enrollment to total enrollment showed mean percentages as follows: large schools, 49.3%; medium sized schools, 58.1%; small schools 77.8%. Of all schools, business enrollment to total enrollment in mean percentage was 57.3% (p. 81).

However, Wheeless' total business student enrollment included "duplication of students".

In a study of guidance and counselling practices in business education in selected high schools of Iowa, Sprehe (1966) found that the percentage of students majoring in business education varied from

8 per cent to 34 per cent. The largest percentage of the twenty-five schools (40 per cent) had 20 - 29 per cent of their students majoring in business. Sprehe considered students as majoring in business "if their program included the 'finishing courses' such as secretarial practice" (p. 100). According to size of school, Sprehe had groups 1 through 5 with group 1 school being the smallest with 400-499 students and group 5 school being the largest with 1300 or above students. Nine of the ten schools in groups 4 and 5 had 20 per cent or more of students majoring in business while only one of the schools in groups 1 and 2 had 20 per cent of students majoring in business.

Purposes of Business Education

In a study to determine the status of business education in the high schools of Alberta, Porozny (1962) found that, in general, two purposes of business education were recognized, namely, vocational and non-vocational. This was revealed by answers to questionaires received from 273 business teachers in 174 high schools.

Gibson (1964) made a study to determine the status of business education in the secondary schools of Missouri. Using data from the administrators and teachers of business, reports of the State Department of Education and opinions expressed in the writings of leading business educators, Gibson found that a high majority of teachers and principals believed that business education contributed to both vocational and non-vocational education.

Wheeless (1964), in an attempt to evaluate business education programs in Northwest Arkansas, concluded, among other things, that the main purpose of business education was to provide vocational education.

However, in each of the above studies no attempt was made to distinguish the purposes of business education in terms of school size.

Business Education Curriculum

Beere (1962), in studying Canadian practices in business education, examined the curriculum of business education in Canada. From information gathered from printed courses of study for the high schools of the provinces, and from correspondence with the Departments of Education of the provinces, Beere found that high school business programs of the provinces varied in their provisions for combining business courses and general and academic courses. However, the range of subjects offered and the number of years for which they were offered appeared to be consistent across the country. For example, three years of typewriting and bookkeeping, two or three years of shorthand and two years of office practice were offered in seven out of the ten provinces.

Porozny (1962), in a study of business education in the high schools of Alberta, found that the six most common courses offered by small high schools (100 or fewer st[illegible]) were Typewriting 10, Business Math 11, Record Keeping 10, Consumer Math 21, Typewriting 20 and General Business 10, in that order. The largest number of medium-sized schools (100 to 300 students) offered from four to ten business courses whereas the number of business courses offered by large schools (300 or more students) varied from two to eighteen. Porozny also found that in small high schools some business subjects were offered every second year so that variety in course offerings could be achieved.

Kyle (1963) studied business educa[illegible] in the secondary schools of Lake County, Indiana. Questionnaires were sent to business educators, secondary school principals and employers to determine whether changes were needed in business education in the secondary schools of Lake County, Indiana. On curriculum, he found that traditional courses such as typing, bookkeeping and shorthand appeared frequently in business programs while general business and business arithmetic appeared less frequently. He also found that few courses were taught in business English, etiquette, law, calculation, clerical practice, secretarial practice, commercial geography, comptometry, consumer education, office practice and retail selling. He did not, however, attempt to isolate these practices according to size of school.

Wheeless (1964) also found that the most popular course in the high school business education was Typewriting I, while the second most popular was Bookkeeping I.

Equipment and Facilities

Rieger (1954) made a study to investigate the advisability of establishing a Composite High School to serve the Picture Putte area in Alberta. Among his findings was a need for diversification in the schools of this area by adding to academic programs such subjects as practical agriculture and commercial courses. He further found that diversification would require a reasonable amount of equipment and additional facilities.

Wyllie (1961) developed criteria for evaluating secondary school business programs by studying the literature in business education and by utilising the reactions of twenty-one business teachers.

He concluded that physical facilities like room size and type, permanent fixtures, lighting, furniture and machines are necessary for the running of a good business program.

Neither Rieger nor Wyllie attempted to determine equipment and facilities available or necessary to operate business programs in different sizes of schools.

Wheeless (1964) related the amount of equipment and facilities to the size of school. She concluded that the majority of medium (200-499 students) and small (199 or less students) schools were operating with inadequate equipment and facilities.

Guidance, Counselling and Job Placement

Kyle (1963) found that there was no agreement between business teachers and principals on some principles of guidance. Kyle found that contention existed on the question of "low ability" students being "dumped" into the business programs. He concluded that:

> teachers thought that the slow students were placed in the business programs of Lake County: principals categorically denied the same. In several schools their principals thought the business students were the best intellectually when compared with students in other departments of the same schools. (p. 302).

Kyle also found that over half of the participating principals and less than half of the business teachers stated that business students were guided into the program because they possessed special business aptitudes.

Wheeless (1964) drew the following conclusions in her study in relation to guidance, counselling and job placement:

1. Formal guidance procedures in relation to vocational business students were lacking.
2. Small schools (199 or less students) were exerting less efforts than large schools (500 or more students) to improve guidance.
3. Little co-operation existed between the business and the guidance departments especially in small schools.
4. Many of the small schools did not even have guidance departments.
5. Personal data for guidance was not available for business teachers in small (199 or less students) and medium sized (200-499 students) high schools.
6. Majority of schools in all sizes provided business students with core understanding for initial employment. (p. 82).

Sprehe (1966), in his study of guidance and counselling practices in Iowa high schools, found the following:

1. Parents' tendency to direct their frustration towards their children and placing excessive prestige on college education affected guidance greatly.
2. There was weakness in co-ordination between counsellors and business teachers.
3. Schools with 800 or fewer students were weak in their occupational information services.
4. Time did not permit interviews with all high school students but interviews with all individual grade 12 students were given.
5. Group guidance was much utilized. This was used by 75 per cent of the schools interviewed.
6. Co-operative programs including business departments,

local employment and counselling departments were lacking.

7. Iowa school counsellors reported stronger programs in the area of part-time employment though only 72 per cent of the reporting guidance departments assisted students in finding part-time employment.
8. Follow-up studies in Iowa high schools as reported by the counsellors were not as extensive as desired.

In a study to determine why students had chosen business education programs in the high school, Coulson (1969) found that one of the factors influencing students' choice of business education was the possibility of securing employment after graduation. This was revealed in responses from 99 Grade 11 boys and 532 Grade 11 girls who were registered in business education courses in Edmonton, Alberta. Approximately 26 per cent of the boys and approximately 67 per cent of the girls stated that they "chose business education because they felt it would enable them to secure employment on leaving high school." Coulson further found that approximately 53 per cent of the boys and approximately 20 per cent of the girls stated that they were placed in business education by the school. On the basis of these findings, Coulson concluded that "about two-thirds of the girls chose business education because of its vocational orientation while about one-half of the boys felt they had not chosen their program."

While Coulson's study sought factors affecting students' enrollment in business education directly from the students, the present study sought these factors from the principals and heads of the business departments.

Community Relations

To what extent the school gets involved in the community and vice versa is generally of interest to all educators but especially to business educators.

Wyllie (1961) in developing criteria for evaluating secondary school business programs concluded that home, business and community relations were necessary for business education since the public is interested in what is taking place in the school and especially in the business department. Wyllie did not, however, identify any kinds of community involvement that the school or the business department could undertake.

Kyle (1963) found that lay participation in business program construction was widely accepted by both principals and teachers of the twenty-three high schools which participated in his study. He further found that employers indicated their happiness to have additional contact with personnel from the school.

Both studies cited did not, however, relate community involvement to size of high school.

Teacher Qualifications and Experience

Kyle (1963) found that all the forty-nine business teachers in Lake County, Indiana who participated in the survey had at least a Bachelor's degree. Three had a second Bachelor's degree while twenty-eight of the teachers had Master's degrees. However, he also found that several of the business teachers had not completed either a major or a minor in business. Nevertheless, he concluded that:

> since all of the reporting teachers indicated having a Bachelor's degree and since twenty-eight teachers

> had the Master's degree, evidence indicated that training of the teaching staff of Lake County was satisfactory. (p.85).

Kyle also found that Lake County teachers appeared to be well prepared for teaching bookkeeping, shorthand, business English, general business and typing, in that order.

In terms of teaching experience, Kyle found that shorthand teachers with an average of 17.3 years ranked highest; typing teachers with an average of 14.1 years ranked second while bookkeeping teachers with an average of ten years, ranked last.

In terms of business experience, only three out of the forty-nine business teachers indicated they had not obtained business experience. Three more teachers indicated very little experience. Kyle defined business experience to include the experience acquired before receiving a Bachelor's degree, during the period of study for the Bachelor's degree and after graduation. Both summer and part-time experience were included in the definition.

Kyle, however, did not attempt to relate any of his findings to different size of school.

Wheeless (1964) found that business teachers in large high schools were "very extensively and adequately" prepared; those in medium schools were "adequately" prepared, while those in small schools were "lacking adequate preparation."

In terms of professional qualifications, Wheeless concluded that "in general, the professional preparation of business teachers in Northwest Arkansas is satisfactory" in all sizes of schools.

Wheeless found that the majority of the business teachers included in her study had acquired work experience within the past five years in areas related to the courses they were teaching. Work experience was not, however, related to the size of school.

Problems

Porozny (1962) found in his study of business education in the high schools of Alberta, that the following problems were indicated by small, medium and large high schools:

1. Lack of equipment and facilities.
2. Limited number of business courses.
3. Number of low-ability students in business programs.

In addition to these problems, small schools, indicated a shortage of business teachers and a lack of well-qualified business teachers.

CHAPTER III

DESIGN OF THE STUDY

The design of the study will be described under the following headings: the research instrument, the sample, the pilot study, the interview, and treatment of the data.

The Research Instrument

There were two main ways whereby data could be collected to satisfy the purpose of this study. These two ways were through the use of either (1) a mailed questionnaire or (2) an interview. The use of a mailed questionnaire becomes most advantageous when geographical reasons make it difficult or costly to have face to face contact with respondents. But the questionnaire always has the limitation of low return if much effort is not taken to contact the respondents. There is also the possibility that the respondents might not provide all the information needed by the researcher. It is also possible that respondents unaided might misinterpret questions included in the questionnaire.

The interview method has many advantages. For example as Borg (1963, p. 224) points out:

> 1. The interview permits greater depth than the questionnaire.
> 2. The interview permits following up leads in order to obtain complete data.
> 3. The interview makes it possible to establish and maintain rapport with the respondent or at least determine when rapport has not been established.
> 4. The interview provides a means of checking and assuring the effectiveness of communication between respondent and the interviewer.

Since the geographical regions chosen for the present study were reasonably close, the interview method was selected for the study.

Two questionnaires were developed by the investigator to serve as guides. The first questionnaire (see Appendix I) was divided into seven parts namely: student enrollment; purposes of business education; the business education curriculum; equipment and facilities; community relations; guidance, counselling and job placement; and problems relating to the aforementioned aspects of business education. This questionnaire was answered by the principals and the heads of business departments. The second questionnaire (see Appendix II) was answered by the business teachers. This questionnaire attempted to determine the qualifications, and the teaching and occupational experience of the business teachers.

The Sample

Six high schools made up of two small, two medium and two large schools were selected from each of the following three cities and their surrounding areas: Lethbridge, Calgary and Edmonton. These cities and their surrounding areas were in zones 6, 5, 2 and 3 of the six zones into which Alberta was divided for administrative purposes by the Alberta Department of Education. The high schools in and around Lethbridge were in zone 6, those in and around Calgary were in zone 5 and those in and around Edmonton were in zones 2 and 3.

Two large high schools were selected randomly from among the large high schools in each of the given cities and their surrounding areas. Two medium high schools within the cities and their surrounding areas were also selected. When the high schools of this size were more than two, the two needed for the study were selected randomly from among the total. Lastly two small high schools closest to the cities were selected. And as was done in selecting the large and medium high schools, if the small high schools closest to the cities were more than two, random selection was done to pick the two needed for the study.

The total number of schools for the study was therefore eighteen including six small ones, six medium ones and six large ones. Unfortunately one large school in Lethbridge could not participate in the study. This brought the total number of participating high schools in and around Lethbridge to five. Since there were no other large schools (as defined in the study, using the 1971-72 school enrollment figures) in and around Lethbridge, no substitute was found to replace it. The final total number of participating schools was thus reduced to seventeen. The Table 1 on page 22 illustrates the distribution of schools included in the study.

TABLE 1

NUMBER OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS IN AND AROUND LETHBRIDGE, CALGARY AND EDMONTON PARTICIPATING IN THE STUDY

Size of School	Enrollment	NUMBER OF SCHOOLS			
		Lethbridge Area (Zone 6)	Calgary Area (Zone 5)	Edmonton Area (Zones 2 + 3)	Total
Small	299 or fewer students	2	2	2	6
Medium	300 - 499 students	2	2	2	6
Large	500 or more students	1	2	2	5
Total		5	6	6	17

The Pilot Study

To test the efficacy of the interviewer's questionnaires, a pilot study was conducted from September 18 to September 22, 1972. Three schools, one of each size, in and around Edmonton, Alberta, were used in the pilot study. As a result of the pilot study, the interviewer's questionnaires were modified.

The Interview

The interviews were conducted from October 2 to October 31,

1972. Prior to the interviews, permission was sought from the school superintendents of the counties, districts and divisions involved in the study to allow the investigator to visit the schools. The letter (see Appendix III) requesting permission explained the purpose of the study, identified the school personnel to participate in the study and included a tentative date for the investigator's visit. After permission had been granted, a letter was sent to the principal of each of the schools included in the study. The letter (see Appendix IV) explained the purpose of the study, identified the people to be interviewed, included a tentative date for the investigator's visit and requested the co-operation of the school.

A total of seventeen principals, seventeen heads of business departments and sixty-four business teachers, comprising all the business teachers in the seventeen schools, were interviewed.

At the start of each interview, the investigator sought permission of the respondent for the use of a tape recorder to record the interview. All respondents permitted the investigator to record the interview on the tape thus note-taking by the investigator in the course of the interview was unnecessary.

Each interview with the principal or the head of the business department lasted for approximately one hour. The interviews with the principals were conducted in the principal's office or in the conference room of the school while the interviews with the heads of the business departments were conducted in the office of the head of the business department, in the conference room of the school or in an unoccupied classroom.

Each interview with the individual business teachers lasted for approximately ten minutes. The interviews with the teachers were conducted in the office of the head of the business department, in the conference room of the school or in an unoccupied classroom.

At each interview, the respondents were given a copy of the investigator's questionnaire so that they could read and answer on a tape recorder in the presence of the investigator.

Six of the teachers and one of the heads of the business departments were not able to have interviews with the investigator. However, they did get copies of the investigator's questionnaire, answered the questions in writing and returned them to the investigator while he was at the school. The investigator discussed any questions or problems they had on the interviewer's questionnaire when the respondents returned them. Any such discussion which occurred was taped.

Numerical data such as enrollments which were difficult or impossible to obtain at the time of the interview were obtained from the respondents after the interviews.

Treatment of the Data

After the interviews were completed, the data were transcribed and summarized for each of the schools for analysis.

CHAPTER IV

FINDINGS AND DISCUSSION

In this chapter, the findings of the study will be reported. Each question will be restated after which the findings related to it will be reported. The discussion of the findings will then follow.

QUESTION 1(a)

What differences, if any, exist among small, medium and large high schools in terms of proportion of students enrolled in one or more business courses?

Findings

Table 2 on page 26 shows the proportions of students enrolled in one or more business courses in small, medium and large high schools.

Of the total number of students in the participating small high schools, approximately 56 per cent were enrolled in business courses. Two of the small high schools had approximately 91 per cent and 81 per cent of the respective students enrolled in business courses while two other small schools had more than 50 per cent of the students enrolled in business courses. Only one of the participating small high schools had less than 33 per cent of the students enrolled in business courses while none had less than 25 per cent of the students enrolled in business courses.

TABLE 2

PROPORTION OF STUDENTS ENROLLED IN ONE OR MORE BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Students	Students Enrolled in Business	
		Number	Percentage
Small High Schools			
A	45	23	51.1
B	43	35	81.4
C	405	277	68.4
D	160	55	34.4
E	220	72	32.7
F	70	64	91.4
Total	943	526	55.8
Medium High Schools			
G	455	291	64.0
H	385	196	50.3
I	304	151	49.7
J	565	227	40.2
K	300	112	37.3
L	363	97	27.5
Total	2372	1074	45.3

TABLE 2 cont'd

PROPORTION OF STUDENTS ENROLLED IN ONE OR MORE BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Students	Students Enrolled in Business	
		Number	Percentage
Large High Schools			
M	1218	395	32.4
N	1726	368	21.3
O	2340	1135	48.4
P	1358	371	27.3
Q	1000	497	49.7
Total	7642	2766	36.2

Of the total number of students in the participating medium high schools, approximately 45 per cent were enrolled in one or more business courses. However, none of the medium high schools had more than 75 per cent of the students enrolled in business courses while only two medium high schools had 50 per cent or more of the students enrolled in business courses. Four of the medium high schools had between 33 per cent and 50 per cent of the students enrolled in business courses while none had less than 25 per cent of the students enrolled in business courses.

Of the 7642 students in the five participating large high schools, 2766 were enrolled in business courses. This represented approximately 36 per cent of the students in the large high schools. None of the large high schools had more than 50 per cent of the students enrolled in business courses. Two of the large schools had between 33 per cent and 50 per cent of the students enrolled in business courses while one large school had less than 25 per cent of the students enrolled in business courses.

Discussion

The findings indicate that of the three sizes of high schools, small, medium and large, there was inverse relationship between size and proportion of students enrolled in business courses. The large high schools had the lowest proportion of students enrolled in business courses while the small high schools had the highest proportion of students enrolled in business courses. Though many factors could contribute to this phenomenon, two important ones are offered. First, it appears that the facilities in large schools provided many alternatives for students to the traditional arts and science courses. For example, the vocational department provided alternatives in many kinds of areas such as automotives, electronics, carpentry, welding, beauty culture, household economics; likewise, the industrial arts department provided alternatives. This was not the case in the small high schools where usually the only alternative open to students apart from the traditional arts and science courses was business. Thus, the many opportunities in the large schools tended to distribute the students among the different areas while the existence of only business departments as an alternative to the traditional arts and science courses in the small high schools tended to place all students not wanting to take the traditional arts and science courses into business. This was evidenced in the study by the fact that the medium high school with the lowest percentage of students enrolled in business courses was a modern composite high school with many of the facilities existing in the large high schools.

A second factor which could account for the existence of the large percentage of students enrolled in business courses in small high schools was the limited number of course credits available in small high schools. In some small high schools, when business courses were excluded, the number of course credits that could be obtained from the available sequence of high school courses did not add up to one hundred, the number of credits required for the Alberta High School Diploma. Thus, to obtain the one hundred credits, students had to enroll in business courses. Accordingly, business courses were, in fact required courses. In the present study, only one small high school supported this proposition.

QUESTION 1(b)

What differences, if any, exist among small, medium and large high schools in terms of the proportion of boys enrolled in one or more business courses?

Findings

Table 3 on page 30 shows the proportion of boys enrolled in one or more business courses in small, medium and large high schools.

TABLE 3

PROPORTION OF BOYS ENROLLED IN ONE OR MORE BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Boys	Boys Enrolled in Business	
		Number	Percentage
Small High Schools			
A	25	9	36.0
B	22	15	68.2
C	216	133	61.6
D	80	19	23.8
E	114	24	21.1
F	35	32	91.4
Total	492	232	47.1
Medium High Schools			
G	230	119	51.7
H	187	81	43.3
I	144	58	40.3
J	302	101	32.8
K	150	38	25.3
L	196	22	11.2
Total	1209	419	34.7

TABLE 3 cont'd

PROPORTION OF BOYS ENROLLED IN ONE OR MORE BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Boys	Boys Enrolled in Business	
		Number	Percentage
Large High Schools			
M	643	136	21.1
N	863	103	11.9
O	1170	323	27.6
P	753	114	15.1
Q	500	133	26.6
Total	3929	809	20.6

The six participating small high schools had approximately 47 per cent of the boys enrolled in business courses. Only one small high school had more than 75 per cent of the boys enrolled in business courses. Two small high schools had less than 25 per cent of the boys enrolled in business courses.

The six participating medium high schools had approximately 35 per cent of the boys enrolled in business courses. None of the medium high schools had 75 per cent or more of the boys enrolled in business courses and one medium high school had as low as approximately 11 per cent of the boys enrolled in business courses. In the five remaining medium high schools, the proportion of boys enrolled in business courses ranged from approximately 33 per cent to approximately 52 per cent.

The five participating large high schools had approximately 21 per cent of the boys enrolled in business courses. None of the large high schools had 30 per cent or more of the boys enrolled in business courses. Three of the large high schools had less than 25 per cent of the boys enrolled in business courses with one of these three having as low as only approximately 12 per cent of the boys enrolled in business courses.

Discussion

The findings indicate that, in general, a low proportion of boys was enrolled in business courses in high schools of all sizes. A few exceptions to this were found in some small high schools where sometimes as much as 68 per cent or more were enrolled in business courses. The proportion of boys enrolled in business in large high schools was much lower than that in medium high schools; and the proportion of boys enrolled in business courses in medium high schools was also lower than that in small high schools.

One factor which might account for the difference in the proportion of boys taking business courses in small, medium and large high schools was the availability of equipment and facilities in other programs such as vocational education and industrial arts. When there were facilities for many programs other than business, boys tended to move into some of these areas. In small high schools where facilities for other programs in vocational education and industrial arts were limited, the proportion of boys taking business courses would likely be higher than in the large high schools which offered vocational education and industrial arts. It is, therefore, not surprising that of the ten high schools whose proportion of boys enrolled in business was less than 33 per cent, five were large (that is all of the large high schools which participated in the study), three were medium and two were small.

QUESTION 1(c)

What differences, if any, exist among small, medium and large high schools in terms of the proportion of girls enrolled in one or more business courses?

Findings

Table 4 on page 34 shows the proportion of girls enrolled in one or more business courses in small, medium and large high schools.

Of the total number of girls enrolled in the participating small high schools approximately 65 per cent were enrolled in business courses. Two of the small high schools had over 90 per cent of the girls enrolled in business courses while none of the small high schools had less than 45 per cent of the girls enrolled in business courses.

Approximately 56 per cent of the total number of girls in medium high schools were enrolled in one or more business courses. Though none of the medium high schools had 80 per cent or more of the girls enrolled in business courses, three of the medium high schools had 58 to 76 per cent of the girls enrolled in business courses. The

TABLE 4

PROPORTION OF GIRLS ENROLLED IN ONE OR MORE BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Girls	Girls Enrolled in Business	
		Number	Percentage
Small High Schools			
A	20	14	70.0
B	21	20	95.2
C	189	144	76.2
D	80	36	45.0
E	106	48	45.3
F	35	32	91.4
Total	451	294	65.2
Medium High Schools	225	172	76.4
H	198	115	58.1
I	160	93	58.1
J	263	126	47.9
K	150	74	49.3
L	167	75	44.9
Total	1163	655	56.3

TABLE 4 cont'd

PROPORTION OF GIRLS ENROLLED IN ONE OR MORE BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Girls	Girls Enrolled in Business	
		Number	Percentage
Large High Schools			
M	575	259	45.0
N	863	265	30.7
O	1170	812	69.4
P	605	257	42.5
Q	500	364	72.8
Total	3713	1957	52.7

medium high school with the lowest proportion of girls enrolled in business had approximately 45 per cent of the girls enrolled in business courses.

Approximately 53 per cent of the girls in the participating large high schools were enrolled in business courses. One large high school had approximately 73 per cent of the girls enrolled in business courses while three other large high schools had between 40 and 70 per cent of the girls enrolled in business. The large high school with the lowest proportion of girls enrolled in business had approximately 31 per cent of the girls enrolled in business courses.

Discussion

The findings indicate that, generally, a good proportion of girls in all high schools irrespective of size were enrolled in business courses. This is demonstrated by the proportion of girls enrolled in business courses in each of the three sizes of high schools. In each of the three sizes of high schools, more than 50 percent of the girls were enrolled in business courses. It is also demonstrated by the proportion of girls enrolled in business courses in the individual high schools. Nine of the seventeen participating high schools had 50 per cent or more of the girls enrolled in business courses while only one high school had less than 33 per cent of the girls enrolled in business courses.

One factor which might account for the high proportion of girls enrolled in business courses was the existence of limited routes or programs for girls in the high schools. Even in the large high schools where extensive facilities might exist, programs most commonly offered which were of interest to girls, in addition to the traditional arts and science, were business, household economics and beauty culture. Thus the limited alternatives result in many girls enrolling in business courses in the hope of securing jobs after graduation.

QUESTION 1(d)

What differences, if any, exist among small, medium and large high schools in terms of the proportion of business students enrolled in one, two, three or more business courses?

Findings

Tables 5 through 7 on pages 38, 40 and 43 show the proportions of business students enrolled in one, two, three or more business courses in small, medium and large high schools.

Table 5 shows that in the six small high schools, 66 per cent of the business students were enrolled in only one business course. Two of the small high schools had over 90 per cent of the business students enrolled in only one business course. One small high school, however, had as low as 34 per cent of the business students enrolled in one business course.

In the six medium high schools, approximately 76 per cent of the business students were enrolled in only one business course. Five of the medium high schools had 70 per cent or more of the business students enrolled in only one business course. The medium high school with the lowest proportion of business students enrolled in only one business course had approximately 69 per cent of the business students enrolled in one business course.

In the five large high schools, approximately 75 per cent of the business students were enrolled in only one business course. Three of the large high schools had over 70 per cent of the business students enrolled in only one business course.

TABLE 5

PROPORTION OF BUSINESS STUDENTS ENROLLED IN ONLY ONE BUSINESS COURSE IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Business Students	Business Students Enrolled in only one Business Course	
		Number	Percentage
Small High Schools			
A	23	22	95.7
B	35	12	34.3
C	277	170	61.4
D	55	51	92.7
E	72	53	73.6
F	64	39	60.9
Total	526	347	66.0
Medium High Schools			
G	291	204	70.1
H	196	163	83.2
I	151	110	72.8
J	227	175	77.1
K	112	84	75.0
L	97	67	69.1
Total	1074	803	75.5

TABLE 5 cont'd

PROPORTION OF BUSINESS STUDENTS ENROLLED IN ONLY ONE BUSINESS COURSE IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Business Students	Business Students Enrolled in only one Business Course	
		Number	Percentage
Large High Schools			
M	395	264	66.8
N	368	337	91.6
O	1135	850	74.9
P	371	294	79.2
Q	497	319	64.2
Total	2766	2064	74.6

Table 6 shows the proportion of business students enrolled in two business courses in small, medium and large high schools. In the six small high schools, approximately 23 per cent of the business students were enrolled in two business courses. One small high school had over 65 per cent of the business students enrolled in two business courses. However, two small high schools had as low as 4 per cent and 7 per cent respectively of the business students enrolled in two business courses.

In the six medium high schools, approximately 20 per cent of the business students were enrolled in two business courses. Although none of the medium high schools had 25 per cent or more of

TABLE 6

PROPORTION OF BUSINESS STUDENTS ENROLLED IN TWO BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Business Students	Business Students Enrolled in Two Business Courses	
		Number	Percentage
Small High Schools			
A	23	1	4.3
B	35	23	65.7
C	277	64	23.1
D	55	4	7.3
E	72	13	18.1
F	64	17	26.6
Total	526	122	23.2
Medium High Schools			
G	291	65	22.3
H	196	28	14.3
I	151	23	15.2
J	227	49	21.6
K	112	22	19.6
L	97	21	21.6
Total	1074	208	19.5

TABLE 6 cont'd

PROPORTION OF BUSINESS STUDENTS ENROLLED IN TWO BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Business Students	Business Students Enrolled in Two Business Courses	
		Number	Percentage
Large High Schools			
M	395	90	22.8
N	368	26	7.1
O	1135	169	14.9
P	371	56	15.1
Q	497	104	20.9
Total	2766	445	16.1

the students enrolled in two business courses, none had 10 per cent or less enrolled in two business courses. Thus, all medium high schools had between 11 per cent and 24 per cent of the business students enrolled in two business courses.

In the five large high schools, approximately 16 per cent of the business students were enrolled in two business courses. None of the five large high schools had 25 per cent or more of the business students enrolled in two business courses and one had as low as 7 per cent of the business students enrolled in two business courses.

Table 7 shows the proportion of business students enrolled in three or more business courses in small, medium and large high schools. In the six small high schools, approximately 11 per cent of the business students were enrolled in three or more business courses. However, three of the six small high schools did not have any of the business students enrolled in three or more business courses. In the three remaining small high schools, the proportion of business students enrolled in three or more business courses ranged from approximately 8 per cent to approximately 16 per cent.

In the six medium high schools, approximately 6 per cent of the business students were enrolled in three or more business courses. In two of the six medium high schools, the proportion of business students enrolled in three or more business courses was as low as approximately 1 per cent and approximately 3 per cent respectively.

In the five large high schools, the proportion of business students enrolled in three or more business courses was approximately 9 per cent. One large high school had as low as approximately 1 per cent of the business students enrolled in three or more business courses. However, in the four remaining large high schools, the proportion of business students enrolled in three or more business courses ranged from approximately 6 per cent to approximately 15 per cent.

Discussion

The findings indicate that all three sizes of high schools, small, medium and large, had large proportions of the business

TABLE 7

PROPORTION OF BUSINESS STUDENTS ENROLLED IN THREE OR MORE BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Business Students	Business Students Enrolled in Three or More Business Courses	
		Number	Percentage
Small High Schools			
A	23	-	-
B	35	-	-
C	277	43	15.5
D	55	-	-
E	72	6	8.3
F	64	8	12.5
Total	526	57	10.8
Medium High Schools			
G	291	22	7.6
H	196	5	2.6
I	151	18	11.9
J	227	3	1.3
K	112	6	5.4
L	97	9	9.3
Total	1074	63	5.9

TABLE 7 cont'd

PROPORTION OF BUSINESS STUDENTS ENROLLED IN THREE OR MORE BUSINESS COURSES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Schools	Total Number of Business Students	Business Students Enrolled in Three or More Business Courses	
		Number	Percentage
Large High Schools			
M	395	41	10.4
N	368	5	1.4
O	1135	116	10.2
P	371	21	5.7
Q	497	74	14.9
Total	2766	257	9.3

students enrolled in only one business course. However, the proportion of business students enrolled in only one business course was much larger in medium and large high schools than in small high schools. The high proportion of business students enrolled in only one business course might be interpreted to mean that a high proportion of students generally took one business course for their personal use or for general education purposes. Business courses such as Typewriting 10, Accounting 10, Business Fundamentals 10 or Economics 30 were courses which generally appealed to many students who might want to take a business course for their personal use or for general education purposes.

The findings make it apparent that small high schools had the highest proportion of business students enrolled in two business courses, followed by medium high schools and then large high schools. It is also apparent that the range of proportions of business students enrolled in two business courses was greatest within small high schools.

The findings further indicate that the proportion of business students enrolled in three or more business courses was much higher in small and large high schools than in medium high schools. However, more large high schools than small high schools had 10 per cent or more of the business students enrolled in three or more business courses. While each of the medium high schools had some proportion of the business students enrolled in three or more business courses, this was usually below 10 per cent of the business students.

It is not surprising that more large high schools than small or medium high schools had 10 per cent of the business students enrolled in three or more business courses, since the existence of greater variety of business courses might attract students to specialize in business education. It is, however, strange that when the business students in the high schools were combined by size of high school, small high schools had a greater proportion of the business students enrolled in three or more business courses than did large or medium high schools. This might be attributed to the fact that in some of the small high schools where the number of courses was limited, many of the students might enroll in all the business courses offered in the school. This was demonstrated in the study by the fact that even though only three of the small high schools were offering three or more business courses to some students, two of these schools had approximately 16 per cent and 13 per cent respectively of the business students taking three or more business courses.

QUESTION 2

What differences, if any, exist among small, medium and large high schools in terms of purposes of business education as perceived by principals and heads of business departments?

Findings

Tables 8 through 10 on pages 47, 50 and 52 show the proportion of principals and heads of business departments of small, medium and large high schools identifying specific purposes of business education.

Purposes as Perceived by Principals. The purposes most frequently identified by principals of small high schools were: vocational training, provision of personal use skills, and preparation of students to enter post secondary institutions for further business training.

The principals of two of the six participating small high schools rejected the idea of vocational training as a purpose of business education in their schools. Both principals held that business education in the small high schools served other purposes such as provision of personal use skills, preparation of students to enter post secondary institutions for further business training, and provision of additional options in the high school program. The

TABLE 8

PROPORTION OF PRINCIPALS OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS IDENTIFYING SPECIFIC PURPOSES OF BUSINESS EDUCATION

PURPOSES	PROPORTION OF PRINCIPALS*					
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Vocational Training	4	66.7	5	83.3	5	100.0
Provision of General Education	2	33.3	1	16.7	-	-
Provision of Personal Use Skills	3	50.0	2	33.3	3	60.0
Preparation of Students for Further Business Training	3	50.0	1	16.7	-	-
Provision of Additional Options in the High School Program	1	16.7	2	33.3	1	20.0
Provision of an Alternate Program in the High School	-	-	1	16.7	1	20.0

*Some respondents identified more than one item under the purposes.

principals of the four remaining small high schools identified vocational training and one or more of the following purposes: provision of personal use skills, and preparation of students to enter post secondary institutions for further business training.

The purpose most frequently identified by principals of medium high schools was vocational training. However, the principal of one of the six participating high schools rejected vocational training as a purpose of business education in his school. He identified preparation of students to enter post secondary institutions for further business training and provision of additional options in the high school program as the purposes of business education. The principal of another medium high school identified only vocational training as the purpose of business education in his school. The principals of the four remaining medium high schools identified vocational training and one or more of the following purposes: provision of general education, provision of personal use skills, provision of additional options in the high school program, and provision of an alternate program in the high school.

The purposes most frequently identified by principals of large high schools were vocational training, and provision of personal use skills. To further the achievement of the vocational purpose, two large high schools had the senior business students assigned to the different heads of departments as secretaries. One hundred per cent of the principals in the large high schools identified vocational training and one or more of the following purposes: provision of personal use skills, provision of additional options in the high school program, and provision of an alternate program in the high school.

Purposes as Perceived by Heads of Business Departments: The purposes most frequently identified by the heads of business education departments of small high schools were vocational training and provision of personal use skills. The heads of business departments in two of the six participating small high schools identified vocational training as the only purpose of business education in their schools whereas the heads of business departments in the four remaining small high schools identified vocational training and one or more of the following purposes: provision of general education, provision of personal use skills, and preparation of students to enter post secondary institutions for further business training.

The purpose most frequently identified by the heads of business departments in medium high schools was vocational training. The head of the business department in one of the six participating medium high schools identified vocational training as the only purpose of business education in his school. However, the heads of business departments in the remaining five medium high schools identified vocational training and one or more of the following purposes: provision of general education, provision of personal use skills, preparation of students to enter post secondary institutions for further business training, and provision of additional options in the high school program.

TABLE 9

PROPORTION OF HEADS OF BUSINESS DEPARTMENTS OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS IDENTIFYING SPECIFIC PURPOSES OF BUSINESS EDUCATION

PURPOSES	PROPORTION OF HEADS OF BUSINESS DEPARTMENTS*					
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Vocational Training	6	100.0	6	100.0	6	100.0
Provision of General Education	1	16.7	2	33.3	4	80.0
Provision of Personal Use Skills	3	50.0	1	16.7	2	40.0
Preparation of Students for Further Business Training	2	33.3	2	33.3	-	-
Provision of Additional Options in the High School Program	-	-	1	16.7	1	20.0
Provision of an Alternate Program in the High School	-	-	-	-	1	20.0

*Some respondents identified more than one item under the purposes.

The purposes most frequently identified by the heads of business departments of large high schools were vocational training, provision of general education, and provision of personal use skills. One hundred per cent of the heads of business departments in the large high schools identified vocational training and one or more of the following purposes: provision of general education, provision of personal use skills, provision of additional options in the high school program, and provision of an alternate program in the high school.

Summary on Purposes of Business Education Identified by Principals and Heads of Business Departments. A study of Table 10 indicates that in small high schools, the most frequently identified purposes of business education were vocational training, provision of personal use skills, and preparation of students to enter post secondary institutions for further business training, in that order. In medium high schools, the most frequently identified purpose of business education was vocational training; and in large high schools, the most frequently identified purposes of business education were vocational training, provision of personal use skills, and provision of general education, in that order.

Table 10 also indicates that vocational training as a purpose of business education in the high school was identified by the greatest number of respondents in large high schools and by the least number of respondents in small high schools.

TABLE 10

SUMMARY OF RESPONSES FROM PRINCIPALS AND HEADS OF BUSINESS DEPARTMENTS OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS ON THE PURPOSES OF BUSINESS EDUCATION

PURPOSES	PROPORTION OF PRINCIPALS AND HEADS OF BUSINESS DEPARTMENTS*					
	Small High Schools		Medium High Schools		Large High Schools	
	N=12		N=12		N=10	
	Number	Percentage	Number	Percentage	Number	Percentage
Vocational Training	10	83.3	11	91.7	10	100.0
Provision of General Education	3	25.0	3	25.0	4	40.0
Provision of Personal Use Skills	6	50.0	3	25.0	5	50.0
Preparation of Students for Further Business Training	5	41.7	3	25.0	-	-
Provision of Additional Options in the High School Program	1	8.3	3	25.0	2	20.0
Provision of an Alternate Program in the High School	-	-	1	8.3	2	20.0

*Some respondents identified more than one item under the purposes.

Discussion

The findings indicate that, generally, principals and heads of business departments in all high schools recognized business education as providing vocational training as well as serving other purposes such as providing general education, providing personal use skills, preparing students to enter post secondary institutions for further business training, providing additional options in the high school program, and providing an alternate program in the high school. All respondents who identified vocational training as a purpose agreed that business education provided students with the minimum skills needed for initial employment in the business world.

Even though a good proportion of the respondents in small high schools (approximately 42 per cent) identified preparation of students to enter post secondary institutions for further business training as one of the purposes of business education in their schools, only 25 per cent of the respondents in medium high schools and none in large high schools identified this purpose. This appears to suggest that respondents in medium and large high schools seemed satisfied with the level of proficiency of their business graduates. In fact, in one medium sized composite high school, both the principal and the head of the business department stated that their business graduates were as well equipped as, if not better than, many graduates of business colleges. Both stated that their new school had much better qualified teachers and more up to date equipment than many of the business colleges.

It does not appear surprising that preparation of students to enter post secondary institutions for further training was identified by a good proportion of the respondents of small high schools (approximately 42 per cent) as a purpose of business education in their schools. As pointed out by principals of two small high schools, the meagre equipment and facilities and the limited teaching personnel in many small high schools made it difficult to prepare students well for initial employment. On the basis of the limited facilities and teaching personnel, it is understandable that vocational training as a purpose of business education in the high school was identified by the least number of respondents in small high schools.

QUESTION 3(a)

What differences, if any, exist among small, medium and large high schools in terms of business courses and programs offered?

Findings

Table 11 on page 55 shows the proportion of small, medium and large high schools offering specific business courses during the first semester of the 1972-73 academic year.

In the six participating small high schools, a total of eighteen different business courses were offered in the first semester of the 1972-73 academic year. Only five of the eighteen courses, namely, Accounting 10 and 20, Typewriting 10, 20 and 30 were offered by 50 per cent or more of the participating small high schools. Nine of the remaining business courses were spread among the six small high

TABLE 11

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS OFFERING SPECIFIC BUSINESS COURSES

COURSES	PROPORTION OF HIGH SCHOOLS*					
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Accounting 10	4	66.7	5	83.3	5	100
Accounting 20	3	50.0	2	33.3	2	40.0
Accounting 30	2	33.3	2	33.3	2	40.0
Business Fundamentals 10	2	33.3	1	16.7	3	60.0
Business Foundations 15	-	-	1	16.7	1	20.0
Business Foundations 30	-	-	-	-	1	20.0
Business Organization and Management 30	1	16.7	2	33.3	-	-
Business Machines 22	-	-	-	-	1	20.0
Business Machines 30	1	16.7	3	50.0	4	80.0
Clerical Practice 20	2	33.3	3	50.0	4	80.0

TABLE 11 cont'd

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS OFFERING SPECIFIC BUSINESS COURSES

COURSES	PROPORTION OF HIGH SCHOOLS					
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Data Processing 22	-	-	1	16.7	4	80.0
Data Processing (Unit Rec.) 32	-	-	-	-	2	40.0
Data Processing (Computer) 32	-	-	-	-	1	20.0
Economics 30	2	33.3	2	33.3	1	20.0
General Business 15	-	-	-	-	1	20.0
Law 20	1	16.7	3	50.0	4	80.0
Merchandising 20	1	16.7	-	-	4	80.0
Merchandising 30	-	-	-	-	2	40.0
Office Practice 30	1	16.7	2	33.3	4	80.0
Record Keeping 10	1	16.7	1	16.7	2	40.0

TABLE 11 cont'd

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS OFFERING SPECIFIC BUSINESS COURSES

COURSES	PROPORTION OF HIGH SCHOOLS					
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Secretarial Practice 35	-	-	-	-	1	20.0
Shorthand 10	1	16.7	-	-	-	-
Shorthand 20	1	16.7	3	50.0	5	100
Shorthand 21	-	-	-	-	1	20.0
Shorthand 30	-	-	3	50.0	2	40.0
Shorthand 31	-	-	-	-	3	60.0
Typewriting 10	5	83.3	5	83.3	5	100
Typewriting 20	5	83.3	5	83.3	5	100
Typewriting 30	5	83.3	5	83.3	4	80.0
Work Experience 10	1	16.7	-	-	-	-

TABLE 11 cont'd

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS OFFERING SPECIFIC BUSINESS COURSES

COURSES	PROPORTION OF HIGH SCHOOLS					
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Work Experience 35	-	-	1	16.7	1	20.0

*All schools offered more than one business course.

schools with no one course offered by two or more schools.

In the six participating medium high schools, a total of nineteen different business courses were offered in the first semester of the 1972-73 academic year. Nine of the courses namely: Accounting 10, Business Machines 30, Clerical Practice 20, Law 20, Shorthand 20 and 30, Typewriting 10, 20 and 30 were offered by 50 per cent or more of the participating medium high schools. Five of the business courses were spread among the six medium high schools with no one course offered by two or more schools.

The five participating large high schools were offering a total of twenty-eight business courses in the first semester of the 1972-73 academic year. Thirteen of these courses, Accounting 10, Business Fundamentals 10, Business Machines 30, Clerical Practice 30, Data Processing 22, Law 20, Merchandising 20, Office Practice 30, Shorthand 20 and 31, Typewriting 10, 20 and 30, were being offered by 60 per cent or more of the participating large high schools. Nine other business courses were spread among the five large schools with no one course offered by two or more schools.

One medium high school and two large high schools had well defined business programs or routes. The remaining high schools did not have any well-defined business programs or routes. The medium high school offered three well defined business programs which were labelled "divisions" in the school. These business programs were: Secretarial, Bookkeeping-Clerical, and Accounting-

Business Management. Each of the two large high schools offered five well defined business programs which were labelled majors in one school and programs in the other. The business programs offered in one large high school were: Accounting, Clerical, Data Processing, Merchandising, and Secretarial-Stenography. The business programs offered in the other large high school were: Accounting, Clerical, Data Processing, Marketing and Secretarial. Table 12 on page 61 shows the recommended courses for the existing business programs in the three high schools.

Discussion

The findings indicate that the four courses which were most commonly offered in all high schools, irrespective of size, were Accounting 10, Typewriting 10, 20 and 30. On the other hand, the seven courses which were least offered in all high schools were Business Foundations 30, General Business 15, Business Machines 22, Data Processing (Computer) 32, Secretarial Practice 35, Shorthand 10 and Work Experience 10. Each of the first five of these seven business courses was offered by only one large high school while the last two courses were each offered by only one small high school.

TABLE 12

BUSINESS COURSES RECOMMENDED FOR PROGRAMS OFFERED IN ONE MEDIUM AND TWO LARGE HIGH SCHOOLS

	PROGRAMS				
SCHOOL	ACCOUNTING *	CLERICAL **	DATA PROCESSING	MERCHANDISING ***	SECRETARIAL/ STENOGRAPHY
(Medium)	Accounting 10, 20, 30 Business Fundamentals 10 Business Machines 30 Business Organization and Management 20 Economics 30 Law 20 Merchandising 20 Office Practice 30 Typing 10, 20,	Accounting 10, 20, 30 Business Machines 30 Business Management 30 Economics 30 Law 20 Merchandising 20 Office Practice 30 Typing 10, 20, 30			Accounting 10, 20 Business Machines 22 Office Practice 30 Shorthand 10, 20 Typing 10, 20, 30

TABLE 12 cont'd

BUSINESS COURSES RECOMMENDED FOR PROGRAMS IN ONE MEDIUM AND TWO LARGE HIGH SCHOOLS

SCHOOLS	P R O G R A M S				
	ACCOUNTING *	CLERICAL **	DATA PROCESSING	MERCHANDISING ***	SECRETARIAL STENOGRAPHY
(Large)	Accounting 10, 20, 30 Business Foundation 10, 30 Business Fundamentals 10 Business Machines 22 Business Organization & Management 30 Data Processing 22 Law 20 Record Keeping 10	Business Foundation 10 Business Fundamentals 10 Business Machines 30 Clerical Practice 22 Law 20 Office Practice 30 Record Keeping 10 Shorthand 31 Typing 10, 20, 30	Business Foundation 10, 30 Business Fundamentals 10 Business Machines 30 Data Processing 22, 32 Record Keeping 10 Typing 10, 20, 30	Accounting 10 Business Foundation 10 Business Fundamentals 10 Business Machines 22 Business Organization & Management 30 Law 20 Merchandising 20, 30 Record Keeping 10	Business Fundamentals 10 Business Machines 22 Clerical Practice 30 Office Practice 30 Record Keeping 10 Secretarial Practice 35 Shorthand 20, 30 Typing 10,20,30

TABLE 12 cont'd

BUSINESS COURSES RECOMMENDED FOR PROGRAMS OFFERED IN ONE MEDIUM AND TWO LARGE HIGH SCHOOLS

SCHOOL	P R O G R A M S				
	ACCOUNTING *	CLERICAL **	DATA PROCESSING	MERCHANDISING***	SECRETARIAL/ STENOGRAPHY
(Large)	Accounting 10, 20, 30 Business Machines 30 Business Organization & Management 30 Clerical Practice 20 Data Processing 32 Law 20 Office Practice 30 Typing 10, 20	Accounting 10, 20 Business Machines 30 Clerical Practice 20 Law 20 Office Practice 30 Shorthand 31 Typing 10, 20	Business Machines 30 Business Organization & Management 30 Data Processing 22 Economics 30 Law 20 Typing 10, 20	Business Machines 30 Business Organization & Management 30 Clerical Practice 20 Economics 30 Law 20 Merchandising 20, 30 Office Practice 30 Typing 10, 20	Accounting 10, 20 Business Fundamentals 10 Business Machines 30 Clerical Practice 20 Law 20 Office Practice 30 Shorthand 20, 30 Typing 10, 20, 30

TABLE 12 cont'd

BUSINESS COURSES RECOMMENDED FOR PROGRAMS OFFERED IN ONE MEDIUM AND TWO LARGE HIGH SC[illegible]

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* This was called Accounting-Business Management in another school.

** This was called Bookkeeping-Clerical in another school.

*** This was called Marketing in another school.

It was also found that more large high schools than small or medium high schools offered Business Machines 30, Clerical Practice 20, Data Processing 22 and 32 (Unit Record), Law 20, Merchandising 20, Office Practice 30 and Shorthand 20. The only business course which was offered by more small high schools than either medium high schools or large high schools was Accounting 20, which was offered by 50 per cent of the small high schools, approximately 33 per cent of the medium high schools and 40 per cent of the large high schools.

Two factors, enrollment and equipment, explain why Accounting 10, Typewriting 10, 20 and 30 were most frequently offered in all high schools. Respondents in all schools identified lack of enrollment as a factor preventing them from offering a variety of courses. Enrollment in Accounting 10 and typewriting courses appeared good in all schools partly because of the relatively easy access to secretarial jobs by those with these skills and also because of the fact that many students might want to take these courses for their own personal use. Furthermore, respondents of all schools in the study expressed satisfaction at the number and quality of the typewriters they had. The availability of these typewriters made it possible for typewriting courses to be offered in all schools. This was not the case in courses like Data Processing, where lack of equipment necessarily prevented schools from offering the course. And Accounting did not need any specialized equipment.

With many of the less frequently offered courses, such as Data Processing 22, 32 and Business Machines, lack of equipment was identified as the cause. Business Foundations was in the experimental stages in the 1972-73 academic year and was therefore offered by a selected few schools.

Respondents in all schools, except two principals who were not offering well-defined business programs or routes, attributed the absence of such programs to lack of enrollment and limited equipment and facilities. The two principals, one in a large high school and the other in a medium high school, stated that a preference for diversity over specialization accounted for rejection of programs.

It should be pointed out that in the three high schools where well-defined programs or routes existed, respondents made it clear that students were not forced or required to take the recommended courses. The courses recommended for programs or routes served as guidelines for students wanting to specialize or major in any of the business areas.

QUESTION 3(b)

What differences, if any, exist among small, medium and large high schools in terms of changes in business course offerings within the last academic year.

Findings

Details of changes in business course offerings within the last year in the three sizes of high schools are shown in Table 13 on page 68.

Changes in business course offerings between the 1971-72 and 1972-73 academic years were made by four of the participating six small high schools, five of the six participating medium high schools and all of the five participating large high schools.

Among the schools which made changes in their business course offerings, the types of changes made did not seem to differ with the size of high school. Two types of changes, the addition and elimination of courses, were common to all the high schools. Another type of change was the combination of two different level courses, for example, Accounting 20 and Accounting 30 to Accounting 20-30 which occurred in one small high school and one medium high school.

A course which was eliminated by 50 per cent of medium high schools and 60 per cent of large high schools but not by any small high schools was Shorthand 10. The following courses were also eliminated by one or more (but less than 50 per cent) of the small, medium or large high schools: Typewriting 10, Business Fundamentals 10, Business Organization and Management 30, Data Processing 32 (Unit Record).

The following courses were added by one or more (but less than 50 per cent) of the small, medium or large high schools: Merchandising 20 and 30, Accounting 30, Business Fundamentals 10, Business Organization and Management 30, Business Foundations 10 and 30, Law 20, Business Machines 22, Office Practice 30, Data Processing 32 (Computer).

TABLE 13

SUMMARY OF CHANGES IN BUSINESS COURSE OFFERINGS BETWEEN THE ACADEMIC YEARS 1971-72 AND 1972-73 IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

School and Size		Change(s) in Course Offerings?		Types of Change(s)		
School	Size	Yes	No	Added Course(s)	Eliminated Course(s)	Other
A			X			
B		X		X		
C			X			
D		X			X	
E		X				X
F		X		X		
G		X		X	X	
H		X			X	
I		X		X		X
J			X			
K		X			X	
L				X	X	
M		X		X	X	
N		X			X	
O		X			X	
P		X		X		
Q		X		X	X	

Discussion

The findings indicate that the proportion of high schools in which changes in business course offerings were made varied with sizes. Some changes were made in all of the participating large high schools while changes were made in approximately 83 per cent of medium high schools and in approximately 67 per cent of the small high schools.

Changes which occurred could be attributed to several factors. The elimination of Shorthand 10 by 50 per cent or more of the medium and large high schools was the result of the Department of Education's decision to make Shorthand a two-year course sequence with Shorthand 20 offered in Grade 11 and Shorthand 30 offered in Grade 12 rather than the former three-year course sequence of Shorthand 10, 20 and 30 offered in Grades 10, 11 and 12 respectively. The elimination of the Shorthand 10 course was not therefore caused by any internal factors of the individual schools. It should be indicated, however, that the fact that only 50 per cent of medium and 60 per cent of large high schools eliminated the course within the last year does not mean that the remaining schools were necessarily offering it. It is possible that some of the schools were not even offering the course in the 1971-72 academic year in the first place thus the Department of Education's decision did not bring any change in the offerings of such schools.

In one small school, the elimination of one business course in the 1972-73 academic year was attributed to scheduling by the principal. However, the chairman of the business department in this particular school attributed the elimination of the course to the principal's disregard for business courses. Apparently business courses were the first to be eliminated in this school whenever a scheduling problem existed.

Respondents in all other schools which eliminated courses attributed their actions to lack of enrollment in the courses.

The reasons given by respondents in all schools for the addition of courses fell into three main categories. First, demand for the course as determined by enrollment in the course was the reason most frequently mentioned. This was usually the reason behind the addition of such courses as Business Fundamentals 10, Business Organization and Management 30 and Law 20. Second, the availability of equipment, facilities and teaching personnel (i.e. qualified business teachers) made it possible for some schools to offer courses hitherto not offered. This was the case in the addition of such courses as Merchandising, Business Machines and Data Processing. Finally, special local community needs or school needs also contributed to the addition of some courses. For example, in one medium high school the increase in Indian population in the high school made the school administration decide to offer Business Fundamentals 10 to this particular group of students (and some few other students who wanted to enroll for the course) in an attempt to broaden their knowledge of the business community.

Other courses, especially the 20 and 30 level ones (e.g. Accounting 20, 30 and Merchandising 30) were added in the 1972-73 academic year to the business course offerings because the year happened to be the second or the third year in the 10, 20 and 30 course sequence.

A total of fourteen high schools (out of the seventeen) made some changes in business course offerings. This might be indicative of sensitivity of school administrators to students and local needs.

QUESTION 4(a)

What differences, of any, exist among small, medium and large high schools in terms of equipment and facilities and their maintenance?

Findings

Table 14 on page 72 shows the average number of instructional machines available in small, medium and large high schools.

It is apparent from the table that all schools, irrespective of size were, on the average, well equipped with typewriters. However, in both small and medium high schools there were, on the average, more manual typewriters than electric typewriters, whereas in large high schools, the opposite was the case. In large high schools, the average number of electric typewriters available was almost twice the average number of manual typewriters.

Apart from typewriters, machines found to exist in all schools, irrespective or size, were duplicators, dictating equipment and adding machines.

Small high schools were lacking in machines such as electronic calculators, card punch, sorter and collator. Similarly medium schools had limited numbers of machines such as electronic calculator, card punch, verifier and collator. For example only two medium high schools had electronic calculators, and only one medium high school had a card

TABLE 14

AVERAGE NUMBER OF INSTRUCTIONAL MACHINES AVAILABLE IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Type of Instructional Machine	AVERAGE NUMBER AVAILABLE		
	Small High Schools	Medium High Schools	Large High Schools
Electric Typewriter	11.3	30.1	132.4
Manual Typewriter	40.5	41.5	74.2
Rotary Calculator	.2	1.0	6.0
Key-driven Calculator	.3	1.3	3.8
Printing Calculator	.8	2.2	9.2
Electronic Calculator	-	.5	7.2
Ten-key Adding Machine	2.3	10.5	11.4
Full-key Adding Machine	1.3	1.5	1.2
Ten-key Electronic Adding Machine	-	-	7.8
Bookkeeping Machine	.2	.8	1.0
Accounting Machine	-	-	2.6
Punched Paper Tape Equipment	-	-	.2
Card Punch	-	.2	1.8
Verifier	-	-	.8
Sorter	-	-	.6
Collater	-	-	1.0
Dictating Equipment	2.2	5.0	13.8
Liquid (Spirit) Duplicator	1.5	1.2	1.8
Offset Duplicator	-	.7	1.0

TABLE 14 cont'd

AVERAGE NUMBER OF INSTRUCTIONAL MACHINES AVAILABLE IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

Type of Instructional Machine	AVERAGE NUMBER AVAILABLE		
	Small High Schools	Medium High Schools	Large High Schools
Stencil Duplicator	1.0	1.0	1.6
Varitypers	-	-	0.2
Billing Machine	-	-	0.2
Photocopy Machine	.8	1.0	1.8
Skill-Builder Controlled Reader	-	-	.2
Tachistocope	-	-	.2
Cash Register	-	.2	1.4
Switchboard	-	-	.2
Overhead Projector	2.3	4.0	4.2
Opaque Projector	1.1	1.2	1.2
Film Projector, 16 mm	1.2	2.3	1.4
Slide Projector	1.8	2.8	1.0
Film Strip Projector	1.0	.2	.2
Cassette Tape Recorder	5.1	2.7	2.6
Record Player	2.1	2.7	2.8
Television Monitor	1.0	1.8	1.2

punch while verifiers and collators were non-existent. Large high schools were, however, much better equipped in these machines. For example, three of the five large high schools had electronic calculator and card punch. Other machines like verifier, sorter, punched paper tape equipment, accounting machine, switchboard, skill-builder controlled reader, and tachistocope were found only in large high schools.

In small high schools, photocopy machine and duplicating machine were usually shared with the main office of the school.

On the average, every school, irrespective of size, was found to have at least one of each of the following audio-visual machines: overhead projector, opaque projector, slide projector, record player, cassette tape recorder and television monitor. The proximity of the audio-visual machines to the business department, however, varied with size of high school. In the large high schools, except for a few machines like the opaque projector and television monitor, all audio-visual equipment was kept in the business department. Overhead projector was usually assigned to individual business classrooms.

In the medium high schools, apart from overhead projector which was kept in the business department or individual business classrooms, all other audio-visual equipment was kept in either the school library or the school audio-visual center where it was obtained on request.

In the small high schools, all audio-visual equipment was kept in either the school library or the school audio-visual center and shared with all other departments of the school. With the exception of respondents in one small high school and one medium high school, respondents in the schools where audio-visual equipment was kept in the school library or the school audio-visual center thought the machines were easy to get on demand.

For information on the number of instructional machines available in individual high schools, Tables 15, 16 and 17 on pages 76, 78 and 80 are provided.

Apart from very few machines like photocopy machines, punched tape equipment, card punch, verifier and sorter, all machines in the schools were owned by their respective school boards. However, respondents of two small high schools and one medium high school indicated that in the event of unexpected large typewriting classes, some few additional typewriters were rented.

Equipment Replacement Policy. Many of the respondents in all high schools, irrespective of size, felt that their school boards did not have any firm or well defined policy for equipment replacement. The following were among the typical remarks made by respondents when asked whether a policy for equipment replacement existed in their schools:

> I don't think we have a policy; if you complain a lot they replace it.
>
> No well defined policy though I think it ought to be done.
>
> The school board has a very, very meagre one. For our typewriters its about 10 to 12 years; other machines about 15.
>
> There is, but not consistent. Some machines have been here for eleven years.
>
> Sort of; based primarily on budget but no firm one.
>
> As need arises; usually every ten years.

TABLE 15

NUMBER OF INSTRUCTIONAL MACHINES AVAILABLE IN INDIVIDUAL SMALL HIGH SCHOOLS

Type of Instructional Machine	NUMBER AVAILABLE					
	School A	School B	School C	School D	School E	School F
Electric Typewriter	3	2	19	16	20	8
Manual Typewriter	36	26	105	16	25	35
Rotary Calculator	-	-	-	-	1	-
Key-driven Calculator	1	-	-	-	1	-
Printing Calculator	-	-	-	-	3	2
Electronic Calculator	-	-	-	-	-	-
Ten-Key Adding Machine	1	2	6	-	3	2
Full-key Adding Machine	-	-	6	-	2	-
Ten-key Electronic Adding Machine	-	-	-	-	-	-
Bookkeeping Machine	-	-	-	-	1	-
Accounting Machine	-	-	-	-	-	-
Punched Paper Tape Equipment	-	-	-	-	-	-
Card Punch	-	-	-	-	-	-
Verifier	-	-	-	-	-	-
Sorter	-	-	-	-	-	-
Collator	-	-	-	-	-	-
Dictating Equipment	-	-	3	5	3	2
Liquid (Spirit) Duplicator	2	2	-	2	2	1
Offset Duplicator	-	-	-	-	-	-

TABLE 15 cont'd

NUMBER OF INSTRUCTIONAL MACHINES AVAILABLE IN INDIVIDUAL SMALL HIGH SCHOOLS

Type of Instructional Machine	NUMBER AVAILABLE					
	School A	School B	School C	School D	School E	School F
Stencil Duplicator	1	1	-	2	1	1
Varityper	-	-	-	-	-	-
Billing Machine	-	-	-	-	-	-
Photocopy Machine	1	1	1	1	1	-
Skill-Builder Controlled Reader	-	-	-	-	-	-
Tachistocope	-	-	-	-	-	-
Cash Register	-	-	-	-	-	-
Switchboard	-	-	-	-	-	-
Overhead Projector	6	2	1	2	1	2
Opaque Projector	2	1	1	1	1	1
Film Projector 16 mm	2	2	1	-	1	1
Slide Projector	4	1	1	2	1	1
Film Strip Projector	-	-	6	-	-	-
Cassette Tape Recorder	-	2	4	3	10	2
Record Player	-	3	5	2	-	3
Television Monitor	-	-	3	2	-	1

TABLE 16

NUMBER OF INSTRUCTIONAL MACHINES AVAILABLE IN INDIVIDUAL MEDIUM HIGH SCHOOLS

Type of Instructional Machine	NUMBER AVAILABLE					
	School G	School H	School I	School J	School K	School L
Electric Typewriter	69	13	14	36	25	24
Manual Typewriter	44	52	50	38	30	35
Rotary Calculator	-	-	4	-	1	1
Key-driven Calculator	-	-	5	-	3	-
Printing Calculator	2	5	4	-	2	-
Electronic Calculator	-	-	1	-	-	2
Ten-key Adding Machine	17	5	7	20	4	10
Full-key Adding Machine	3	-	4	-	2	-
Ten-key Electronic Adding Machine	-	-	-	-	-	-
Bookkeeping Machine	1	-	2	-	1	1
Accounting Machine	-	-	-	-	-	-
Punched Paper Tape Equipment	-	-	-	-	-	-
Card Punch	-	1	-	-	-	-
Verifier	-	-	-	-	-	-
Sorter	-	-	-	-	-	-
Collater	-	-	-	-	-	-
Dictating Equipment	4	5	4	4	6	7
Liquid (Spirit) Duplicator	2	2	1	1	2	1
Offset Duplicator	-	-	1	1	1	1

TABLE 16 cont'd

NUMBER OF INSTRUCTIONAL MACHINES AVAILABLE IN INDIVIDUAL MEDIUM HIGH SCHOOLS

Type of Instructional Machine	NUMBER AVAILABLE					
	School G	School H	School I	School J	School K	School L
Stencil Duplicator	1	-	2	1	1	1
Varitype	-	-	-	-	-	-
Billing Machine	-	-	-	-	-	-
Photocopy Machine	2	1	1	-	1	1
Skill-Builder Controlled Reader	-	-	-	-	-	-
Tachistocope	-	-	-	-	-	-
Cash Register	-	-	1	-	-	-
Switchboard	-	-	-	-	-	-
Overhead Projector	5	2	4	5	2	6
Opaque Projector	1	1	1	1	1	2
Film Projector, 16 mm	3	2	4	2	1	4
Slide Projector	3	2	3	3	1	2
Film Strip Projector	-	-	-	-	1	-
Cassette Tape Recorder	2	1	5	3	4	6
Record Player	3	1	5	1	2	4
Television Monitor	1	3	2	-	1	4

TABLE 17

NUMBER OF INSTRUCTIONAL MACHINES AVAILABLE IN INDIVIDUAL LARGE HIGH SCHOOLS

Type of Instructional Machine	NUMBER AVAILABLE				
	School M	School N	School O	School P	School Q
Electric Typewriter	108	116	228	110	100
Manual Typewriter	50	36	215	35	35
Rotary Calculator	8	7	9	-	6
Key-driven Calculator	8	3	2	-	6
Printing Calculator	12	8	12	14	-
Electronic Calculator	6	-	-	2	28
Ten-key Adding Machine	16	6	-	27	8
Full-key Adding Machine	1	2	3	-	-
Ten-key Electronic Adding Machine	-	-	29	10	-
Bookkeeping Machine	-	4	-	-	1
Accounting Machine	-	-	7	6	-
Punched Paper Tape Equipment	-	-	-	-	1
Card Punch	-	1	7	1	-
Verifier	-	1	2	1	-
Sorter	-	1	1	1	-
Collater	2	1	1	1	-
Dictating Equipment	9	9	37	6	8
Liquid (Spirit) Duplicator	1	2	-	2	4
Offset Duplicator	1	1	1	1	1

TABLE 17 cont'd

NUMBER OF INSTRUCTIONAL MACHINES AVAILABLE IN INDIVIDUAL LARGE HIGH SCHOOLS

Type of Instructional Machine	NUMBER AVAILABLE				
	School M	School N	School O	School P	School Q
Stencil Duplicator	2	1	1	1	3
Varitypers	-	1	-	-	-
Billing Machine	-	-	-	1	-
Photocopy Machine	1	1	1	2	3
Skill-Builder Controlled Reader	-	1	-	-	-
Tachistocope	-	-	-	1	-
Cash Register	-	3	2	2	-
Switchboard	-	-	-	1	-
Overhead Projector	4	2	3	6	6
Opaque Projector	1	1	2	1	1
Film Projector, 16 mm	1	3	1	1	1
Slide Projector	1	1	1	1	1
Film Strip Projector	-	1	-	-	-
Cassette Tape Recorder	4	3	3	1	6
Record Player	1	4	1	2	6
Television Monitor	1	2	1	1	1

Equipment Maintenance Policy. The study attempted to determine the types of policies followed in the high schools for the maintenance of the instructional machines in the business department. Table 18 is a summary of the policies in operation and the proportion of small, medium and large high schools in which specific policies were in use.

The table shows that approximately 83 per cent of small high schools, 83 per cent of medium high schools and 60 per cent of large high schools had contracts with some agents for the repair and servicing of their instructional machines. The contract was with either the original manufacturer of the machines or some independent agent. In the remaining small high schools and large high schools which did not have any contract for machine repairs and servicing, servicemen were called when the need arose.

One medium high school and none of the small and large high schools used a serviceman employed by the school board for machine repairs and servicing.

Discussion

The availability of relatively large numbers of typewriters in all high schools is not an accident. Typewriting is one of the basic courses in business education and is beneficial for personal use skills. School boards seem to have reacted positively to the demand by providing good numbers of typewriters in the schools. One phenomenon which might be considered as unfortunate by some people is the fact that despite the growing supply of electric typewriters, small and medium

TABLE 18

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS IN WHICH SPECIFIC EQUIPMENT MAINTENANCE POLICIES WERE IN OPERATION

Type Of Policy	PROPORTION OF HIGH SCHOOLS					
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Contract with Manufacturer (a)	3	50.0	-	-	2	40.0
Contract with Independent Agent (b)	2	33.3	2	33.3	-	-
School Board's Trained Service Man (c)	-	-	1	16.7	-	-
No Contract Paid Services as they come	1	16.7	-	-	2	40.0
Both (a) & (b)	-		3	50.0	1	20.0

high schools still had a large proportion of manual typewriters.

It does not appear surprising that machines such as punched paper tape equipment, sorters, verifiers, collators and accounting machines were found only in large schools. The highly expensive nature of these machines, whether rented or purchased, demands adequate utilization to warrant presence in the school. The limited student population in the small and medium high schools could result in underutilization of the machines. Thus, school boards, it appears, found it economically unfeasible to furnish small and medium high schools with such expensive pieces of equipment.

The study did not show any sign of competition between leasing or purchasing equipment since in all the participating high schools the basic machines such as typewriters, adding machines, duplicating machines and calculators were owned by their respective school boards. What factors may force a school board to favor leasing equipment? Straub and Gibson in the Eastern Business Teachers' Association 1963 Yearbook (Selden and Meyer (eds), 1963 p. 177) put out the following arguments which could influence a school board's decision to lease or purchase equipment:

Arguments for purchasing equipment:

1. Equipment is stable in design and form.
2. Equipment will last a reasonable length of time.
3. New models on the market are not likely to make other machines obsolete.
4. Equipment is rugged and will withstand pupil use during a reasonable life.
5. There is a high demand for training on this type of equipment locally (such as an older model).
6. Where a variety of makes and models of each type of equipment may be desired, it might be impossible to acquire them under a rental plan since some companies do not like to rent one or two pieces of equipment.

Arguments for leasing equipment:

1. Major changes are constantly being made.
2. Equipment is used only short periods during the year.

3. Maintenance and repair are difficult and expensive.
4. Local demand may be temporary.
5. It may not be possible through purchase to provide a well-rounded set of equipment in the office practice classroom.
6. Equipment replacement money is difficult or impossible to obtain.

It appears in the study that school boards on weighing the arguments on either side of purchasing or leasing have favored purchasing. Purchasing might have become attractive, too, because of the fact that most machines can be traded in for new ones easily which minimizes the strengths of some of the arguments for leasing. It should be pointed out, however, that the Technical and Vocational Training Assistance (TVTA) Act passed by the Federal Government in 1960 might also have contributed to the ownership of equipment in many of the schools. The Act covered the period 1961 - 1967. One of the provisions of the Act was that the federal government contribute 75 per cent towards expenditures for technical and vocational training facilities (capital and equipment) approved by the provincial governments and completed by March 31, 1963. The federal contribution was to drop to 50 per cent from then to March 31, 1967. Thus by this Act, school boards did in fact have the incentive to own the equipment since they were paying only a fraction of the cost. While it is difficult to say at any point of time which of these two means of acquiring equipment is better, it is important that choice is made only after careful consideration of the local needs and the business trends.

The absence of well defined replacement policies in a majority of schools, irrespective of size, could be a serious threat to the well being of the business department in the sense of the department's ability to keep up to date. The absence of replacement policies reinforces the statement by Straub and Gibson (Selden and Meyer (eds.), 1963, p. 180) that "few schools have any idea regarding the length of time a piece of equipment can or should be used". They recommended that equipment be traded in for new models at the following times:

Typewriters	5 years
Stencil Duplicators	10 years
Liquid Duplicators	10 years
Varitypers	10 years
Addressing Machines	10-15 years
Dictating Equipment	5 years
Offset Duplicators	5 years
Rotary Calculators	8 years
Key-driven Calculators	5-7 years
Printing Calculators	5-7 years
Ten-key Adding Machines	5-7 years
Full-key Adding Machines	8 years
Bookkeeping Machines	8 years
Accounting Machines	10-15 years
Photocopy Machines	5-10 years

These estimates could be considered conservative in the face of the modern fast changing business environment. However, some schools in the study have had some of their equipment for almost one and one-half times as long as, or longer than, these estimates.

Well-defined equipment replacement policy might include definite replacement times determined on the basis of use and sturdiness of the equipment. Straub and Gibson (Selden and Meyer (eds.), 1963) recommend the use of an advisory committee made up of local businessmen to help officials in charge of replacement policies to set up guidelines for replacement.

Though all high schools were fairly well furnished with audiovisual equipment, their accessibility to the business departments was much easier in large high schools than in either medium or small high schools. This is rather unfortunate since one would expect that some of the basic audiovisual equipment like overhead projectors, slide projectors and cassette tape recorders could be kept in the business departments in all schools.

Responses from principals and heads of business departments indicated that equipment servicing and repairing in all high schools appeared adequate. While the majority of schools had contracts with either the original manufacturers or with independent local agents, some schools did not have any contracts but called for services when the need arose.

QUESTION 4(b)

What differences, if any, exist among small, medium and large high schools in terms of library facilities for business departments?

In this study, no attempt was made to critically evaluate the existing library facilities in the different sizes of high schools.

This would have called for the use of an objective standard such as the number of books per student or the number of volumes and materials available, against which the prevailing conditions of each school could have been compared. Rather, principals and heads of business departments were asked to identify and subjectively evaluate the available library facilities in terms of their accessibility to business students.

Findings

The library facilities were defined in terms of space, books and periodicals. It was found that none of the participating six small high schools had either a separate library or a reference room devoted to business education. Each of the schools had a main library which catered for all students including those taking business courses. In four of the small high schools, principals and heads of business departments were in agreement as to the adequacy of the library facilities. Two libraries were classified as adequate; one was classified as inadequate and one was classified as extremely inadequate by both the principals and the heads of business departments of the schools in question. In the remaining two small high schools, the principals and the heads of the business departments were not in agreement as to the adequacy of the library facilities. In one of the schools, the principal classified the library facilities as adequate while the head of the business department classified them inadequate. In the other, the principal classified the library facilities as inadequate but the head of the department classified them adequate.

As was found in small high schools, none of the participating six medium high schools had either a separate library or reference room for business departments. Business teachers and students used the schools' main library. However, unlike respondents of small high schools, principals and heads of business departments agreed on the adequacy of the library facilities. Principals and heads of business departments in two medium high schools stated that the library facilities were inadequate though none classified the library facilities as extremely inadequate as was the case in one small high school. However, principals and heads of business departments of the remaining four schools classified the library facilities as adequate. Respondents of one of these four [illegible]ools classified the library facilities as extremely adequate.

Large high schools presented a different picture in terms of separate library facilities for business departments. Though none of the five participating large high schools had a separate library for use by both students and staff of the business department, three schools had the business departments maintain a resource material center where important reference books and periodicals were kept for use by the staff.

In three of the large high schools, the principals and heads of business departments stated that in terms of their current needs, the library facilities were adequate. In a fourth large high school the principal and the head of the business department classified the library facilities as very inadequate as far as books on business were concerned though they both agreed that space and periodicals were adequate. However, in the fifth large high school there was disagreement between the respondents as to the adequacy of the library facilities. The principal stated that except for business books, the library facilities were adequate while the head of the business department classified the library as inadequate as far as space, books and periodicals for business students were concerned.

Schools were asked to identify the specific business education and related periodicals received by the business department or the school library. Details of the findings are contained in Table 19 on page 91. It was found that three of the participating small high schools did not receive any periodicals. Library facilities of two of these small high schools were classified by the principals and heads of business departments as inadequate in one and extremely inadequate in the other. Each of the medium and large high schools received at least two periodicals.

The four periodicals most frequently received were Pitmanite, received by approximately 33 per cent of small high schools, 83 per cent of medium high schools and 100 per cent of large high schools; Synoptic, a publication of the Alberta Business Education Council and Cross-Canada Comment, a publication of the Canadian Association of Business Education Teachers, each of which was received by approximately 33 per cent of small high schools, 83 per cent of medium high schools and 80 per cent of large high schools; and Today's Secretary received by approximately 50 per cent of small high schools, 50 per cent of medium high schools and 60 per cent of large high schools.

TABLE 19

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS RECEIVING SPECIFIC BUSINESS EDUCATION OR RELATED PERIODICALS

PERIODICALS	PROPORTION OF SCHOOLS					
	Small High Schools		Medium High Schools		Large High Schools	
	Number	Percentage	Number	Percentage	Number	Percentage
Financial Post	2	33.3	2	33.3	3	60.0
Today's Secretary	3	50.0	3	50.0	3	60.0
Business Education Forum	1	16.7	2	33.3	2	40.0
Pitmanite*	2	33.3	5	83.3	5	100
Synoptic	2	33.3	5	83.3	4	80.0
Cross-Canada Comment	2	33.3	5	83.3	4	80.0
Business Education World	1	16.7	2	33.3	2	40.0
The Canadian Consumer	-	-	2	33.3	-	-
American Voc. Journal	-	-	1	16.7	-	-

TABLE 19 cont'd

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS RECEIVING SPECIFIC BUSINESS EDUCATION OR RELATED PERIODICALS

PERIODICALS	PROPORTION	OF	SCHOOLS			
	Small High Schools		Medium High Schools		Large High Schools	
	Number	Percentage	Number	Percentage	Number	Percentage
Business Education Review	-	-	1	16.7	-	-
Canadian Business	-	-	1	16.7	-	-
Journal of Business Education	-	-	1	16.7	-	-
Marketing	-	-	-	-	1	20.0
Consumer Reports	-	-	-	-	2	40.0
Economic Council of Canada Report	-	-	-	-	1	20.0
Business Week	-	-	-	-	1	20.0
School Progress	-	-	-	-	1	20.0

* "Pitmanite" is presently published under the new name of "MEMO". Publication of the Pitmanite has been discontinued. In its place a new periodical, Memo, incorporating Pitmanite is published.

It was also found that in one small high school, three medium high schools and three large high schools, certain periodicals (usually Synoptic, Cross-Canada Comment and Business Education World) were received by individual teachers who made them available to the library or the business department.

Discussion

The findings in the study indicate that there appears to be no attempt towards the establishment of separate library facilities for business departments. This could be attributed to the high cost involved in such a venture and also to the fact that such an attempt could result in demand for separate library facilities by some other departments of the schools, a demand which would be too expensive to satisfy. However, the provision of reference materials in some departments of large high schools is commendable. This privilege was not, however, limited to business departments for, as respondents indicated, other departments of the school apart from business departments, did maintain some reference materials in spaces provided for the purpose in their departments.

The limited library facilities for business in the small high schools could be attributed to the limited number of business courses offered. In schools where only typing, accounting and shorthand are offered, it might be argued that there is less need for extensive library facilities than in schools where business foundations, economics, law and office practice are offered.

Disagreement on the adequacy of the library facilities between principals and heads of business departments as was found to exist in two small high schools and one large high school could be a deterrent to their improvement especially if the department head sees them inadequate while the principal sees them adequate.

The dearth of periodicals in small high schools is extremely serious considering the fact that three of the six participating small high schools did not subscribe to any periodical at all. This appears rather ironic since one would expect small high schools, usually situated some distance away from cities and commercial centers, to subscribe to more periodicals in an attempt to keep up to date on events. Schools in cities and towns have, in addition to school libraries, library facilities in the city or town; this is not usually the case in small towns where many small high schools are situated.

It is not surprising that among the periodicals frequently received by the schools were *Pitmanite*, *Synoptic* and *Cross-Canada Comment*. First, *Pitmanite* is sent to schools on request without charge. Second, the *Synoptic* is published in Alberta by the Business Education Council for all members of the Council. It was usually made available to the department by individual teachers who were members of the Council. Third, the subscribers of the *Synoptic* automatically receive the *Cross-Canada Comment* at no extra charge.

QUESTION 5(a)

What differences, if any, exist among small, medium and large high schools in terms of counselling services extended to business students?

Findings

Of the six participating small high schools, three did not have any full-time or part-time professional guidance counsellors. In each of these three schools, counselling services were provided to business students by the principal and the business teachers. In two of the three small high schools where guidance departments were available, counselling services were provided to business students by both the guidance departments and the business departments. In the third small high school where a guidance department was available, counselling services were provided to business students by the guidance department, the business department and the administration.

Five of the six principals in the small high schools rated their counselling services to business students as effective, while one stated that even though good, they needed some improvement. Five of the six business department heads in the small high schools were satisfied with the counselling services provided to the business students. However, in the sixth school where counselling services were provided by the guidance department, the business department and the administration, the head of the business department stated that even though the practice as it existed was effective, he thought it would be much more effective to have vocational counselling to business students provided only by the business department with general guidance, such as dealing with social and psychological problems of the students, provided by the school guidance department.

Two of the six participating medium high schools did not have guidance departments while the remaining four had guidance departments. In three of the four high schools which had guidance departments, counselling services were provided to business students by the guidance departments and the business departments. The fourth school had the counselling services provided to business students by the guidance department, the business department and the administration. In the two medium high schools which did not have guidance departments, counselling services were provided to business students by both the business departments and the administration.

The principals of all six participating medium high schools rated their counselling services to business students as effective. However, only four of the six heads of business departments rated the counselling services to business students as effective. The head of the fifth business department stated that the services, as they existed, needed improvement. The head of the sixth business department in the school where counselling services to business students were provided by the guidance department, the administration and the business department rated the services poor, and stated, further, that he would prefer that the business department have its own guidance department.

All five participating large high schools had guidance departments. The guidance departments of two large high schools provided the counselling services to business students whereas in two other large high schools, the counselling services were provided to business students by both the guidance and the business departments. In the one remaining large high school, a system of advisors comprised of classroom teachers and the principal was used. Each advisor was responsible for a maximum of twenty-five students in Grades 10 through 12. These advisors dealt with the students' programs, courses and with various other educational problems, and referred to the guidance department students who had family, social or psychological problems.

In the large high school where counselling services were provided by advisors and the guidance department, both the principal and the head of the business department rated the service as very effective. In two of the remaining four large high schools, the principals and the heads of the business departments stated that counselling services to business students were effective. In a third large high school, the principal classified the counselling services to business students as effective while the head of the business department stated that they needed improvement. In the remaining large high school both the principal and the head of the business department stated that the counselling services to business students needed improvement. Furthermore, the head of the business department in this school stated that he strongly felt that the business department needed a counsellor attached solely to the business department.

From their knowledge of students in business departments, principals and heads of business departments were asked to identify the factors that might influence students' enrollment in business courses and programs. Tables 20 and 21 on pages 99 and 100 show the summaries of the responses from the principals and the heads of business departments.

Responses from Principals: In small high schools the factors most frequently identified by principals as influencing students' enrollment in business courses and programs were student interest and parental influence each of which was identified by approximately 67 per cent of the principals. All the principals identifying parental influence as a factor agreed that very often parental influence was negative to business courses and programs since parents usually wanted their children to take matriculation subjects in order to satisfy university entrance requirements. The next factor frequently identified by principals of small high schools was the teachers' ability to communicate with students and the teachers' teaching abilities. Other factors identified by principals in small high schools were job opportunities, lack of aptitude for matriculation subjects and peer group influence, each of which was identified by approximately 33 per cent of the principals of small high schools. The influence of the guidance department and special aptitudes for business were each identified by only one principal as an important factor influencing students' enrollment in business courses and programs.

In medium high schools, the factors most frequently identified

TABLE 20

PROPORTION OF PRINCIPALS IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS IDENTIFYING SPECIFIC FACTORS WHICH INFLUENCE STUDENTS' ENROLLMENT IN BUSINESS COURSES AND PROGRAMS

FACTORS	PROPORTION		OF			PRINCIPALS*
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Student Interest	4	66.7	4	66.7	5	100
Lack of Aptitude for Matriculation Subjects	2	33.3	4	66.7	3	60.0
Teacher Influence	3	50.0	1	16.7	3	60.0
Parental Influence	4	66.7	2	33.3	2	40.0
Peer Group Influence	2	33.3	-	-	1	20.0
Guidance Department Influence	1	16.7	2	33.3	3	60.0
Job Opportunities	2	33.3	-	-	1	20.0
Special Aptitudes for Business	1	16.7	1	16.7	1	20.0
Other	-	-	1	16.7	-	-

*Some respondents identified more than one factor.

TABLE 21

PROPORTION OF HEADS OF BUSINESS DEPARTMENTS IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS IDENTIFYING SPECIFIC FACTORS WHICH INFLUENCE STUDENTS' ENROLLMENT IN BUSINESS COURSES AND PROGRAMS

FACTORS	PROPORTION OF HEADS OF BUSINESS DEPARTMENTS					
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Student Interest	3	50.0	5	83.3	5	100
Lack of Aptitudes for Matriculation Subjects	5	83.3	1	16.7	3	60.0
Teacher Influence	2	33.3	2	33.3	-	-
Parental Influence	1	16.7	3	50.0	3	60.0
Peer Group Influence	1	16.7	-	-	2	40.0
Guidance Department Influence	1	16.7	3	50.0	-	-
Job Opportunities	2	33.3	-	-	1	20.0
Special Aptitude for Business	1	16.7	-	-	-	-
Other	2	33.3	1	16.7	-	-

*Some respondents identified more than one factor.

by principals as influencing students' enrollment in business courses and programs were lack of aptitude for matriculation subjects and student interest. Each of these factors was identified by four principals (approximately 67 per cent). The principal of one of these schools identified student interest as the only factor which influenced student enrollment in business courses and programs in his school. He stated that a student's registration in a higher level course in the school was independent of his or her performance at the lower level ones. Thus students were not advised to stop taking certain subjects and to transfer to others in business or vocational education because of poor achievement in a 10-level course in, say, a matriculation subject. The students could thus take a 20-level course following poor performance on a 10-level course. According to the principal of this school, the practice ensured that only students' interests channelled them into courses or programs they selected.

The next factors frequently identified by principals of medium high schools were guidance department influence and parental influence. The parental influence was rated as a negative factor. The least identified factors by principals of medium high schools were teacher influence and special aptitudes for business. Job opportunities were not considered influential by any of the principals.

In all the participating large high schools, the factor most frequently identified by principals as influencing students' enrollment in business courses and programs was student interest. The next factors frequently identified by the principals of large high schools were lack of aptitude for matriculation subjects, teacher influence, and guidance department influence. Of the two principals who identified parental influence as a factor, one stated that it was negative towards business courses and programs because parents usually wanted their children to take courses to meet university entrance requirements. However, the other principal stated that parental influence was sometimes very positive towards business courses and programs since many advised their children to take certain business courses in order to be able to obtain jobs after graduation.

In the large high schools, peer group influence, job opportunities and special aptitude for business were each identified by one principal as an important factor influencing students' enrollment in business courses and programs.

Responses from Heads of Business Departments: In small high schools the factors most frequently identified by heads of business departments as influencing students' enrollment in business courses and programs was lack of aptitude for matriculation subjects, identified by approximately 83 per cent of the heads of business departments. This was followed by student interest which was identified by 50 per cent of the participating heads of business departments in small high schools. Teacher influence and job opportunities were together the third most frequently identified factors with parental influence, peer group influence and special aptitude for business as the least frequently identified factors.

Other factors identified by heads of business departments in small high schools as influencing students' enrollment in business courses and programs were the small number of available high school courses thus making it necessary for students to take business courses; and scheduling.

In the medium high schools, the factor most frequently identified by heads of business departments as influencing students' enrollment in business courses and programs was student interest. This was identified by five of the six heads of business departments of the participating medium high schools. The next factors were parental influence and guidance department influence. All the three heads of business departments who identified parental influence as an important factor stated that usually the parental influence was negative towards business courses and programs because parents normally wanted their children to take university entrance requirement courses. Two of the three heads of business departments who identified guidance department influence as a factor stated that it had a negative influence on students' enrollment in business courses and programs in the sense that only low ability students were guided into the business department by the guidance department. Comments like the following were made:

> In the guidance and counselling department, there is some "dumping" of drop-outs into business programs.
>
> The guidance and counselling department sometimes refers students who are not doing well into the business department.

In contrast, the head of the other business department who identified guidance department influence stated categorically that there was no negative influence from the guidance department affecting students' enrollment in business courses and programs.

Factors identified by a minority of heads of business departments in medium high schools were teacher influence, lack of aptitude for matriculation subjects and limited number of courses thus making it necessary for students to take business courses.

In the large high schools, the factors most frequently identified by heads of business departments as influencing students' enrollment in business courses and programs was student interest. This was followed by lack of aptitude for matriculation subjects and parental influence. Two of the business departments heads who identified parental influence as an important factor stated that usually it was a negative influence since parents wanted their children to take matriculation subjects. However, the other head of the business department stated that the problem with parents was lack of awareness. Thus, when parents were made aware of the program, they did encourage their children to take business courses.

Other influential factors identified by a minority of heads of business departments in large high schools were peer group influence and job opportunities. Teacher influence and special aptitude for business were not identified by any of the heads of departments in the large high schools.

Discussion

Even though only half the number of participating small high schools had guidance departments, a large number of both principals and heads of business departments were satisfied with the counselling services to business students. This might be attributed to the small size of the schools which made face to face relationships among teachers and students possible.

The majority of both principals and heads of business departments in the large high schools rated their guidance and counselling services to business students as effective; and further, none of the respondents saw the guidance department as a negative influence on students' enrollment in business courses and programs. Could these ratings be attributed to greater freedom of choice for students in large high schools or to better school organization in large high schools? The study did not attempt to answer this question. However, greater freedom to students and good organization could be influential factors.

It may be concluded that in all high schools, irrespective of size, the two most important factors influencing students enrollment in business courses and programs were student interest and lack of aptitude for matriculation subjects. While lack of aptitude for matriculation subjects appeared more important in small high schools, students' interest appeared more important in large and medium high schools.

Surprisingly, however, all principals in all schools denied the use of the business department as a "dumping ground" for low ability students; and only two heads of business departments in the small and medium high schools thought the business department was a "dumping ground" for low ability students. Respondents rated students in, say, Typing 30, Shorthand 30 and Accounting 30 as good, if not better than, some students taking matriculation subjects.

Another surprising finding was the small number of principals and heads of business departments in all schools who identified job opportunities as a factor influencing students' enrollment in business courses and programs. Could this be attributed to a growing acceptance of business education as general education rather than as strictly vocational education? However, if "student interest", a factor given by many respondents as an important influence on students' enrollment in business courses and programs, were analysed, it might be found that a remote factor behind such "interest" might be future chance of obtaining jobs.

The majority of respondents who identified parental influence as a factor influencing students' enrollment in business courses and programs stated that the influence was negative towards business courses and programs because of parents' desire to have their children take matriculation subjects in order to obtain university entrance. This attitude might change if business courses were accepted as matriculation subjects leading to university entrance.

QUESTION 5(b)

What differences, if any, exist among small, medium and large high schools in terms of job placement services to business students?

Findings

Of the six participating small high schools, only one provided job placement services to business students. In the one school where these services were provided, they were done formally through the use of school advertisements in local newspapers and informally through the business teachers' and the principal's own personal contacts in the community. In one of the schools where placement services were not provided formally, the principal stated that sometimes he obtained jobs for his business students through his personal contacts as a board member of a local business. Similarly, a head of the business department of another school stated that he undertook to do these services informally. The principals and heads of the business departments of two other schools expressed the hope that placement services would be provided in their schools in the future because they shared the idea that placement is important to the schools. One principal, however, stated that placement should be left to agencies like Canada Manpower Center, or the Department of Health and Social Development.

Three of the six participating medium high schools provided job placement services to business students. In each of the schools, these services were provided through either the guidance department or the business department both of which worked closely with Canada Manpower Centers. In one of the schools which did not provide job placement services to business students, the head of the business department stated that although job placement was a responsibility of the guidance department it "busied itself too much with timetable problems and thus had little time for business contacts." In all of the medium high schools not providing job placement services, it was found that sometimes businessmen would telephone the school requesting applicants with certain skills. These requests were made known to the business students.

Two of the five participating large high schools had formal job placement services for business students. In one of these schools, job placement services were provided by the business department but the head of the business department in this school felt that the services should be provided by the guidance department. According to this business department head, job placement was the reason for the development of guidance departments in the late 1920's. The principal of this school, however, thought that the capable students with business skills had no difficulty finding jobs without assistance from the school. In the second school, job placement services were provided by the guidance department which collaborated with Canada Manpower Centers, and local businessmen. The head of the business department in this school was not, however, impressed with the services being provided.

Different opinions on job placement services were expressed by principals and heads of business department of large high schools which did not provide these services. In one large high school, the principal stated that although he did not want the school to operate a formal job placement service center, he would like to see a Canada Manpower Center establish an office within the school building. He thought this would be effective because of its convenience and accessibility. The principal of another school stated that he did not subscribe to the idea that the school should provide job placement services. He thought the students should be able to find their own jobs.

The majority of the heads of business departments in all the participating high schools which did not formally provide job placement services undertook, informally, to help students obtain jobs through personal contacts.

Discussion

There appears to be general consensus on the importance and value of job placement services for business students. However, many schools, especially small ones, did not provide these services extensively. The absence of job placement services in the small high school might be attributed to lack of personnel or to the problem of the limited number of business establishments in small towns.

The question of which department (business or guidance) should undertake to provide job placement services was not formally investigated in the present study. However, existing practices in the schools indicated no preference.

QUESTION 5(c)

What differences, if any, exist among small, medium and large high schools in terms of follow-up studies of business graduates?

Findings

It was found that none of the six participating small high schools conducted follow-up studies of its business graduates. However, principals of two of the schools upheld the value of follow-up studies and hoped that they would be implemented in their schools in the near future.

None of the participating medium high schools conducted follow-up studies of its business graduates. However, in one school, an attempt was made to keep in touch with the students a year after graduation by devoting a page or two of the school's yearbook to the previous year's graduates.

Three of the five participating large high schools conducted follow-up studies of their business graduates. In one of these schools, the business department conducted these studies for business graduates only. However, in the other two schools, the guidance department conducted annual follow-up studies of all graduates of the school.

Discussion

The finding that only 60 per cent of large high schools and none of the small and medium high schools conducted follow-up studies appears discouraging. It is possible, however, that many small high school business graduates worked in the local community and neighbouring towns, hence teachers and principals were aware of student employment. However, this might not be an adequate substitute for a formal follow-up study which brings records of graduates up to date. If effective changes are to be made in the business education offerings then employment information concerning recent graduates should be considered.

QUESTION 6

What differences, if any, exist among small, medium and large high schools in terms of the business department's relationship with the immediate community?

Findings

Table 22 shows a summary of the kinds of community involvement undertaken by the three sizes of high schools.

TABLE 22

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS IN WHICH SPECIFIC TYPES OF COMMUNITY INVOLVEMENT WERE IDENTIFIED

TYPES OF INVOLVEMENT	PROPORTION OF SCHOOLS*					
	Small N=6		Medium N=6		Large N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Work Experience	5	83.3	5	83.3	4	80.0
Provision of Adult Classes in Business Education	2	33.3	2	33.3	-	-
Guest Speakers from Business Community	2	33.3	2	33.3	3	60.0
Other	2	33.3	2	33.3	3	60.0

*Respondents identified more than one type of involvement.

It was found that the kind of community involvement undertaken by a high proportion of schools, irrespective of size, was work experience. In fact, work experience was offered by approximately 83.3 per cent of the participating small and medium high schools and by 80 per cent of the participating large high schools.

Sixty per cent of large high schools indicated involvement with the community through the use of guest speakers. Approximately 33 per cent of small high schools and medium high schools indicated similar involvement. The use of the business department's facilities for adult education programs was indicated in small and medium high schools but not in large high schools.

Other kinds of involvement practised by a minority of high schools, irrespective of size, were visits to business and use of the business department's facilities and personnel in rendering service to community organizations such as churches or clubs.

A very special way by which one small high school increased its involvement with the community was through the publication of a local newspaper. The newspaper was put out by the Merchandising 20 class which used materials supplied by the local co-operative. A large proportion of the newspaper was devoted to advertisements from the local businesses. By this activity, it was hoped that the students would gain experience in the world of advertising and at the same time, would provide a service to local business.

When respondents were asked whether the business department should get involved with the local community more than other departments of the school, the heads of business departments with the exception of one in a medium high school, agreed that it should. The one business department head who replied negatively commented that he saw a need for involvement by all departments of the school. Those who stated that the business department should have greater involvement argued that since the department placed (or aimed at placing) a good number of its students directly into employment, it behooved the department to become more involved with the community for the purpose of identifying needs so that the relevancy of the business program would be maintained.

The heads of the business departments identified the following as among the ways by which business department involvement with the community could be achieved: work experience programs, provision of adult classes through business departments, guest speakers from businesses, and visits to business. In addition, the head of a business department of one medium high school stated that the use of business students as "office overload" and "girl Friday" could be another way of maintaining more involvement with the community.

The majority of principals agreed that it is important for the business department to be more involved than other departments of the school with the immediate community. The principals of one small high school, two medium high schools and one large high school did not, however, agree that the business department should have any greater involvement than the other departments with the community. The following are some of the comments made by these principals:

> No I don't think so; I would see no particular reason why they should have greater involvement.

> . . . I will explain my answer of "no" from a philosophical background to the effect that I consciously strive to avoid emphasis on the different sections of my school. I have one large high school having all kinds of students and I attempt to avoid identifying these students as belonging to the technical department, business department, or the academic department. This separation aspect is played down at all times so I wouldn't want to have it appear that one department should be involved with the community more than the others. I want my school involved with the community but not on a separate department basis.

Discussion

It is apparent from the findings that the majority of the high schools, irrespective of size, used work experience as a means of getting involved with the immediate community. While some schools had work experience as a course for credit, other schools, by work experience meant work study by which students were placed in offices once every two or four weeks for the purpose of obtaining experience and not for the purpose of obtaining credits. Guest speakers were also utilized by some high schools as a means of getting involved with the community.

One would wonder why provision for adult classes taught by the business department was not indicated in any large high school though it was indicated in a third of the small and medium high schools. This phenomenon might be attributed to the existence of post secondary institutions in large cities, which provide for the education of adults. In Edmonton and Calgary there were institutes of technology, vocational colleges and community colleges; while in Lethbridge there was a community college. However, in Edmonton, one large high school not included in the study was providing adult classes through the business department at the time of the investigation.

Although the majority of respondents in all schools, irrespective of size, did subscribe to the idea of the business department getting involved in the community, some respondents, especially the principals, did not want to create the impression that the other departments of the school should not become involved.

QUESTION 7(a)

What differences, if any, exist among small, medium and large high schools in terms of business teachers' qualifications?

Findings

Degrees and Business Certificates Held by Teachers. Table 23 on pages 116 and 117 shows the details of degrees and business certificates held by business teachers in small, medium and large high schools.

A third of the business teachers in small high schools held at least one bachelor's degree with a major in business education. However, more than a third of the business teachers in the small high schools (approximately 42 per cent) had neither a degree with a business major nor any special business certificates. In other words, at least 42 per cent of the business teachers in small high schools had no educational qualifications in business. Of the 42 per cent, 25 per cent held degrees in area(s) other than business but had no educational qualifications in business while 17 per cent did not have either degrees

TABLE 23

PROPORTION OF BUSINESS TEACHERS WITH AND WITHOUT DEGREES AND SPECIAL BUSINESS CERTIFICATES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

QUALIFICATIONS	PROPORTION		OF		TEACHERS	
	Small High Schools N=12		Medium High Schools N=18		Large High Schools N=34	
	Number	Percentage	Number	Percentage	Number	Percentage
Master's degree (with major in Bus. Ed. in at least the bachelor or the Master's degree)*	-	-	2	11.1	2	5.9
Two or more Bachelor's degrees (with major in Bus. Ed. in at least one degree)*	-	-	1	5.6	5	14.7
One Bachelor's degree (with major in Bus. Ed)*Φ	4	33.3	10	55.6	20	58.9
One or more degrees (in area(s) other than Bus. Ed.) but holding some special Business Certificate(s).	2	16.7	-	-	1	2.9
No degree but holding Special Business Certificate(s).	1	8.3	4	22.2	4	11.8

TABLE 23 cont'd.

PROPORTION OF BUSINESS TEACHERS WITH AND WITHOUT DEGREES AND SPECIAL BUSINESS CERTIFICATES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

QUALIFICATIONS	PROPORTION OF TEACHERS					
	Small High Schools N=12		Medium High Schools N=18		Large High Schools N=34	
	Number	Percentage	Number	Percentage	Number	Percentage
One or more degrees (in area(s) other than Business Education) and no special Business Certificate(s).	3	25.0	-	-	1	2.9
No degree and no special Business Certificate(s).	2	16.7	1	5.6	1	2.9

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* These include degrees in Commerce, Business Administration and Economics.

Φ One teacher had a minor in Business Education but also held certificates in typing and bookkeeping.

or any educational qualifications in business.

In one small high school one of the business teachers stated that she was teaching typing because she took typing in high school though she admitted having failed her Typing 30 course. In the same school, the instructor teaching Accounting 10 and Business Fundamentals 10 stated that he taught these courses on the basis of what he read from the textbooks and felt that he was "not doing that bad."

Approximately 72 per cent of the teachers in medium high schools held at least a bachelor's degree with a major in business education. About 22 per cent held only special business certificates while approximately 6 per cent had no educational qualifications in business.

A large proportion of business teachers in large high schools (approximately 80 per cent) held at least a bachelor's degree with a major in business education. However, about 12 per cent of the teachers had no degrees but held special business certificates.

Special certificates in business most commonly held by teachers in all schools irrespective of size were: certificates in accounting bookkeeping, shorthand, typewriting, business education; and intermediate business certificates. One teacher held the diploma, Associate of the Chartered Institute of Secretaries (A.C.I.S.).

Professional Certificates held by Business Teachers. Table 24 on page 119 shows the details of the professional certificates held by teachers in small, medium and large high schools.

In small high schools, a majority of the business teachers (approximately 83 per cent) held either the Professional Certificate or the Interim Professional Certificate.

TABLE 24

PROPORTION OF BUSINESS TEACHERS HOLDING SPECIFIC TYPES OF PROFESSIONAL CERTIFICATES IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS

TYPES OF PROFESSIONAL CERTIFICATES	PROPORTION		OF		TEACHERS	
	Small High Schools N=12		Medium High Schools N=18		Large High Schools N=34	
	Number	Percentage	Number	Percentage	Number	Percentage
Professional Certificate	7	58.3	5	27.8	25	73.5
Interim Professional Certificate	3	25.0	6	33.3	6	17.6
Provisional Certificate	-	-	2	11.1	-	-
First Class Permanent	1	8.3	1	5.6	-	-
High School (Teachers') Certificate	-	-	1	5.6	-	-
Permanent Standard 'S'	1	8.3	3	16.7	1	2.9
Permanent Junior 'E'	-	-	-	-	1	2.9
Temporary Certificate	-	-	-	-	1	2.9

In medium high schools approximately 61 per cent of the teachers held either the Professional Certificate or the Interim Professional Certificate. However, a fairly good proportion of the teachers in medium high schools (approximately 28 per cent) held either the Provisional Certificate or the Permanent Standard 'S" Certificate.

In large high schools a large proportion of the teachers (approximately 91 per cent) held either the Professional Certificate or the Interim Professional Certificate.

Discussion

The findings indicate that in terms of business education qualifications, the large high schools had the highest proportion of well-qualified business teachers whereas the small high schools had the lowest. This was evidenced by the proportion of business teachers with a bachelor's or higher degree with a major in business education in the three different sizes of high schools. The proportions were approximately 33 per cent, 72 per cent and 80 per cent among small, medium and large high schools respectively. The findings support Downey's (1965, p. 48) general observation on Alberta that "the least well educated teachers teach in the smallest high schools."

The low proportion of well-qualified business teachers in small high schools might be attributed to a variety of factors. Among them could be low enrollment in business courses making it economically unfeasible for school boards to hire well-qualified business teachers, the remoteness of the location of some of the small high schools which might discourage new graduates from accepting appointments, and the general shortage of teachers in specialized fields including business.

In terms of professional qualifications, the findings indicate that teachers in all the high schools irrespective of size, held some kind of professional teachers' certificate. This is, however, not surprising since in Alberta all persons are required to hold a professional teachers' certificate before being allowed to teach.

QUESTION 7(b)

What differences, if any, exist among small, medium and large high schools in terms of teaching experience of business teachers?

Findings

Table 25 shows the details of the teaching experience of business teachers in small, medium and large high schools.

TABLE 25

PROPORTION OF BUSINESS TEACHERS IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS WITH SPECIFIC NUMBER OF YEARS OF TEACHING EXPERIENCE

YEARS OF TEACHING EXPERIENCE	PROPORTION		OF		TEACHERS	
	Small High Schools N=12		Medium High Schools N=18		Large High Schools N=34	
	Number	Percentage	Number	Percentage	Number	Percentage
Less than 5	4	33.3	10	55.6	11	32.4
5 - 10	4	33.3	3	16.7	11	32.4
Over 10	4	33.3	5	27.8	12	35.3

In the six small high schools, there was an equal number of teachers in each of the three teaching experience categories: less than five years, five to ten years and over ten years.

In the six medium high schools, approximately 56 per cent of the teachers had less than five years of teaching experience while approximately 16 per cent of the teachers had five to ten years of teaching experience. In other words, a very large proportion (approximately 83 per cent) of the teachers in medium high schools were in the two teaching experience categories of less than five years and over ten years.

As in small high schools, the teachers in large high schools were almost equally divided among the three teaching experience categories. Approximately 32 per cent had less than five years teaching experience, approximately 32 per cent had five to ten years teaching experience and approximately 35 per cent had over ten years of teaching experience.

Discussion

The findings indicate that apart from medium high schools which had a very small proportion of teachers with five to ten years teaching experience, teachers in small and large high schools were generally equally divided among the three categories of teaching experience groups namely: less than five years, five to ten years, and over ten years.

In the small high schools, the proportion of teachers in each of the three categories of teaching experience groups might tend to reflect the composition of teachers in the schools as a whole rather than of business teachers alone. This might be so since many of the teachers in small high schools taught courses in the area of speciality and taught business courses as subsidiary to their own specialized areas.

QUESTION 7(c)

What differences, if any, exist among small, medium and large high schools in terms of occupational experience of business teachers?

Findings

Table 26 on page 124 shows the details of the occupational experience of business teachers in small, medium and large high schools. Occupational experience was defined as experience gained on any full-time paid work apart from teaching, including work done during the summer holidays. In this study, two to four summers of work were assumed to constitute a year of occupational experience.

In the six participating small high schools, a high proportion of the business teachers (approximately 58 per cent) had had one to four years of occupational experience while none of the teachers had over ten years of occupational experience. Two of the teachers had no occupational experience. Both teachers with no occupational experience had less than five years of teaching experience.

In the medium high schools, the number of teachers was almost equally divided among the four categories of occupational experience: no occupational experience (approximately 28 per cent), one to four years of occupational experience (approximately 28 per cent), five to

TABLE 26

PROPORTION OF BUSINESS TEACHERS IN SMALL, MEDIUM AND LARGE HIGH SCHOOLS WITH SPECIFIC NUMBER OF YEARS OF OCCUPATIONAL EXPERIENCE

YEARS OF OCCUPATIONAL EXPERIENCE	PROPORTION		OF		TEACHERS	
	Small High Schools N=12		Medium High Schools N=18		Large High Schools N=34	
	Number	Percentage	Number	Percentage	Number	Percentage
0	2	16.7	5	27.8	3	8.8
Less then 1	-	-	-	-	1	2.9
1 - 4	7	58.3	5	27.8	17	50.0
5 - 10	3	25.0	4	22.2	4	11.8
Over 10	-	-	4	22.2	9	26.5

ten years of occupational experience (approximately 22 per cent) and over ten years of occupational experience (approximately 22 per cent). Of the five teachers without occupational experience, two had less than five years of teaching experience and three had more than ten years of teaching experience.

In the large high schools, a great majority of the teachers (approximately 88 per cent) had had occupational experience though the greatest number of them (approximately 77 per cent) fell into the two occupational experience categories of one to four years and over ten years. Three of the teachers (approximately 9 per cent) had no occupational experience whereas one teacher worked for only three months during one summer. Of the three teachers without occupational experience, one had less than five years of teaching experience, one had five to ten years of teaching experience and one had over ten years of teaching experience.

Types of occupational positions most often identified by teachers in all schools irrespective of size, were: Typist, General Clerk, Secretary Treasurer, Accounting Clerk, Bookkeeper and Stenographer. A few of the teachers had occupied positions such as Assistant Internal Auditor, Office Manager, Accountant, Police Officer (Royal Canadian Mounted Police) or some other executive position in a company.

Discussion

The findings indicate that a small proportion of teachers (ten of the sixty-four business teachers) in all the three sizes of schools had had no occupational experience. Of those with no occupational experience, five had less than five years of teaching experience, one had five to ten years of teaching experience, and four had over ten years of teaching experience. Thus, 90 per cent of the teachers with no occupational experience had either less than five years or over ten years of teaching experience.

It could therefore be concluded that teachers with the highest number of years of teaching experience and the new entrants into the teaching profession had less occupational experience than the middle group of teachers. However, no attempt was made in the present study to determine whether or not the teachers without occupational experience were specialized business teachers.

QUESTION 8

What differences, if any, exist among small, medium and large high schools in terms of problems related to student enrollment; purposes; curriculum; equipment and facilities; guidance, counselling and job placement; community relations; and teachers in business education?

Findings

Table 27 on page 127 shows the proportion of high schools in which specific problems were identified.

Problems which were most frequently identified in small high schools by both principals and heads of business department were: lack of enrollment followed by lack of teaching personnel. Surprisingly, lack of equipment was identified as a problem in only one small high school. Other problems identified in small high schools by a minority of respondents were: too much emphasis on matriculation subjects (identified by only one head of business department), and reconciling the needs of the immediate community with the needs of students wishing to seek work outside the community (identified by only one principal).

In medium high schools, the problem most frequently identified was lack of equipment and facilities. This was followed by lack of enrollment and lack of teaching personnel each of which was identified in two of the participating medium high schools. Other problems each of which was identified by only one head of a business department were:

TABLE 27

PROPORTION OF SMALL, MEDIUM AND LARGE HIGH SCHOOLS IN WHICH SPECIFIC PROBLEMS IN BUSINESS EDUCATION WERE IDENTIFIED

TYPES OF PROBLEMS	PROPORTION		OF		SCHOOLS*	
	Small High Schools N=6		Medium High Schools N=6		Large High Schools N=5	
	Number	Percentage	Number	Percentage	Number	Percentage
Lack of Teaching Personnel	2	33.3	2	33.3	1	20.0
Lack of Enrollment	4	66.7	2	33.3	-	-
Lack of Equipment and Facilities	1	16.7	3	50.0	1	20.0
Other	2	33.3	5	87.3	3	60.0

*In some schools, more than one problem was identified.

need for a guidance counsellor, high teacher turnover, fear of obsolescence of shorthand among students which might in the near future influence their choice of this course, updating of business teachers, and the expansion of business programs in higher institutions of learning which might adversely affect enrollment in high school business programs and courses.

In large high schools, there was no single problem which was identified by two or more high schools. Problems tended to be individual in nature. The principal of one large high school identified the following as problems in his school: lack of equipment, and lack of breadth in business programs to include classes for low ability students. Each of the following was identified by only one principal as a problem: the possibility of dwindling enrollment in business courses and programs because of the present unemployment situation in the country, lack of work or vocational orientation of the universities training business teachers resulting in insufficient knowledge of requirements at the work place, and future overcrowding in business course enrollments arising from an increase in school population without a corresponding increase in facilities which might result in enrollment in business courses being restricted to only students taking business programs.

Each of the following was identified by only one head of a business department as a problem in large high schools: lack of time for business teachers to engage in professional improvement activities such as attending conventions, the absence of well defined equipment replacement policies resulting in schools getting "stuck" with obsolete equipment, inadequate counselling services to business students, and lack of qualified teachers.

Discussion

The evidence indicates that problems differed with size of high school. In small high schools the most frequently identified problem was lack of enrollment while in medium high schools the problems identified were lack of equipment and lack of enrollment. In large high schools the problems identified were more individual in nature.

One would wonder why lack of equipment was not recognized as a problem in many small high schools. This might be explained in terms of enrollment problems. Without sufficient enrollment for a course, the need for equipment and facilities for a course would not be apparent. As the principal of one small high school stated, "if we have a large enrollment, we can requisition the county for some highly sophisticated equipment."

CHAPTER V

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

In this chapter, conclusions reached in pursuit of purposes set out for the study will be presented. This will be followed by implications of the study, and recommendations for future investigation.

CONCLUSIONS

The following conclusions on the different aspects of business education in selected high schools of Alberta were arrived at on the basis of the findings of the study.

Student Enrollment

1. A comparison of the proportions of students enrolled in business courses and programs in the three sizes of high school showed that small high schools had the highest proportion of students enrolled in business whereas large high schools had the lowest proportion of students enrolled in business.
2. In the majority of the high schools included in the study, there was a lower proportion of boys than girls enrolled in business courses and programs.
3. A high proportion of business students in all the participating high schools was enrolled in only one business course.

4. A very low proportion of business students in all the participating high schools was enrolled in three or more business courses.

Purposes of Business Education

1. The majority of principals and heads of business departments in all the participating high schools recognized business education in the high school as providing vocational training, personal use skill, additional options, general education, and preparing students for further business training in post secondary institutions.

Business Education Curriculum

1. There was a smaller number of business courses available in small high schools than in medium high schools. Large high schools provided the greatest number of business courses.
2. The four business courses most frequently offered in all the participating high schools were: Typewriting 10, 20 and 30, and Accounting 10.
3. The seven business courses least frequently offered in all the participating high schools were: Business Foundations 30, Business Machines 22, General Business 15, Data Processing (Computer) 32, Shorthand 10, Secretarial Practice 35, and Work Experience 10. It should be pointed out that Business Foundations 30 was offered on an experimental basis at the time of the investigation and, therefore, was not offered in many schools.

4. Well-defined business programs or routes were not in existence in the majority of the participating high schools. Such programs existed in only one medium high school and two large high schools. Accounting, Clerical, and Secretarial-Stenographic were the programs offered in all the three high schools.
5. Although changes in business course offerings occurred in all three sizes of high schools, they occurred most often in large high schools followed by medium high schools and then small high schools.

Equipment, Facilities and their Maintenance

1. Principals and heads of business departments in all the participating high schools appeared to be satisfied with the number of typewriters and audio-visual equipment such as overhead projectors, opaque projectors, cassette tape recorders and record players available in the schools.
2. Large high schools were better equipped with machines such as electronic calculators, accounting machines, card punches, sorters, and verifiers than were medium and small high schools.
3. Analysis of responses from principals and heads of business departments in all the participating high schools indicated that accessibility to audio-visual equipment by the business department was more limited in small high schools and least limited in large high schools.

4. Usually, small high schools shared with the main office of the school the use of some machines such as duplicators and photocopiers.
5. The majority of the machines in use in all the participating high schools were owned by their respective school boards. Equipment leasing was not extensive.
6. Responses from principals and heads of business departments in all the participating high schools indicated that equipment replacement policies were very limited in all high schools, irrespective of size.
7. The three policies for repairing and servicing equipment most frequently followed in the high schools were: (1) contracts with the original manufacturers of equipment, (2) contracts with independent servicing agents and (3) independent servicing agents with whom no contract existed.
8. Responses from principals and heads of business departments in all the participating high schools indicated that business education library facilities in terms of space, books and periodicals were limited in small high schools but adequate in the majority of medium and large high schools.
9. The most frequently received periodicals in the participating high schools were Pitmanite, BEC Synoptic, Cross-Canada Comment, and Today's Secretary. At the time of the investigation, the publication of the Pitmanite had ceased but in its place, a new periodical called Memo was being published.

Guidance, Counselling and Job Placement

1. Few small high schools had guidance departments.
2. The majority of principals and heads of business departments in all the participating high schools rated their counselling services to business students as effective.
3. The factors influencing student enrollment in business courses and programs most frequently identified by principals and heads of business departments in medium and large high schools were: student interest, lack of aptitude for matriculation subjects, parental influence, teacher influence, and guidance department influence.
4. Principals and heads of business departments in small high schools were divided on the factors influencing student enrollment in business courses and programs. While principals most frequently identified student interest, followed by parental influence and teacher influence, heads of business departments most frequently identified lack of aptitude for matriculation subjects, followed by student interest, teacher influence and job opportunities.
5. In all the participating high schools, the majority of principals and heads of business departments who identified parental influence as a factor affecting student enrollment in business courses and programs indicated that such influence was, more often than not, negative towards business courses and programs. This was attributed to parents' desire to have their children enroll in matriculation subjects in order to satisfy university entrance requirements.

6. The majority of principals and heads of business departments in all the participating high schools rejected the notion that the business department was used as a "dumping ground" for low ability students.
7. In all the participating high schools, there was agreement among the majority of principals and heads of business departments on the importance of job placement services. However, job placement services were limited in all high schools, and particularly in small high schools.
8. No follow-up occupational studies of business graduates were conducted in the participating small and medium high schools, and only a small number were conducted in the participating large schools.

Community Relations

1. There was extensive involvement with the community through the work experience programs established by business education departments in all the participating high schools. On the other hand, there was limited involvement with the community through other means such as trips to businesses, and use of guest speakers.

Business Teachers' Qualifications and Experience

1. All business teachers in the participating high schools held valid teaching certificates. However, in terms of business education qualifications, small high schools had the lowest proportion of well-qualified teachers.

2. In terms of teaching experience, the business teachers in small and large high schools were almost equally divided among the three teaching experience categories: less than five years, five to ten years, and over ten years. A very small proportion of the business teachers in the medium high schools (approximately 17 per cent) were in the five-to-ten-year category.
3. A large proportion of business teachers in all the participating high schools had had occupational experience in business or industry.
4. A large proportion of business teachers without occupational experience in all the participating high schools had either less than five years or more than ten years of teaching experience.

Problems

1. The most frequently identified problems in small high schools were lack of enrollment in business courses, followed by lack of spcialized teaching personnel, and lack of equipment and facilities. In medium high schools, the most frequently identified problems were lack of equipment and facilities, followed by lack of enrollment in business courses, and lack of specialized teaching personnel. In large high schools, no single problem was identified by two or more schools. Accordingly, problems in large high schools appear to be individual in nature.

IMPLICATIONS

The following are the major implications which emerge from the findings of the study:

1. In many aspects, business education in Alberta differs with size of high school. This might imply that size of school should be considered when reference is made to business education in Alberta.
2. The problem of the limited number of business teachers with specialization in business education in small high schools might imply that business course offerings in the small high schools be limited to offerings for which there are well-qualified business teachers.
3. The low proportion of boys enrolled in business courses in the majority of the high schools included in the study might imply either that boys are not aware of the opportunities in business education or that few opportunities are provided for boys in business education.
4. The large proportion of respondents identifying parental influence and guidance department influence on student enrollment in business education courses and programs might imply that students do not really have a choice of courses among those offered in the high school.
5. The evidence in the study that parents would generally discourage their children from enrolling in business courses because they are not accepted as university entrance requirements might imply that students who might otherwise

enroll in business courses are being deterred from doing so.

6. The absence of occupational follow-up studies of business graduates in the majority of high schools included in the study might imply that high schools claiming vocational training as a purpose of business education lack feedback from the graduates of their programs.
7. The extensive community involvement by the majority of the high schools included in the study indicates the importance that business education departments attach to contact with the community and to the benefits that might accrue from such contact.
8. The problem of lack of equipment and facilities identified by a good proportion of the respondents in medium high schools (50 per cent) might imply that students' interests in areas requiring specialized equipment cannot be satisfied in many medium high schools.

RECOMMENDATIONS

In the course of the study, certain areas were uncovered which in the investigator's opinion call for further examination or investigation. The following are recommended for investigation:

1. Parents' and students' attitudes towards business courses and programs in the high school.
2. The characteristics and aptitudes of high school business education students to determine whether they differ from other students.

3. Male students' perceptions of the high school business program.
4. The necessity and value of business or industrial occupational experience as a component of business teacher education programs.
5. The extent of exposure of students to business education in the three-year (or four-year) high school program.
6. A comparison of aspects of business education in a large sample of small, medium and large high schools of Alberta in an attempt to verify the findings of the present study. It is also recommended that the study be extended to include the complete academic year.

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APPENDICES

APPENDIX I

INTERVIEWER'S GUIDE A

(Principals and Chairmen of Business Education Departments)

Name of School:

Address:

Enrollment (Total):

Boys:

Girls:

Respondent:

Title:

Is your school on semester basis? Yes No

Student Enrollment

1. How many students are taking business education courses? (Include both business education students and non-business education students).

    How many are boys?

    How many are girls?

2. How many students in this school are taking:

    One course in business education?

    Two courses in business education?

    Three or more courses in business education?

3. Please indicate the number of sections/classes offered in each business education course and the total enrollment for each course by filling in the table below:

Course	Number of Sections/Classes	Enrollment
Eg.		
Accounting 10	3	70

Purposes

1. As perceived by you, what are the purposes of business education in your school?

Curriculum

1. What business education courses are being offered in your school during the 1972-73 academic year? If on semester, what business education courses are being offered in the 1st semester?
2. Does your school cluster the courses into programs (eg. Secretarial programs, Clerical program, Accounting program etc.)? Yes No
   If yes, what programs are offered and what courses are included in each program?
3. What factors determine the business education courses you offer?
4. If programs are offered, what factors determine these?
5. What factors prevent your school from offering a wider variety of business education courses?
6. If business education programs are offered, what factors prevent your school from offering a wider variety of programs?

Changes in Course Offerings

1. How do the course offerings of 1971/72 differ from the course offerings of 1972/73 in business education?
2. If there were changes in business education course offerings

between the two years, what factors were responsible for these changes?

Equipment and Facilities

1. What equipment is available for business education in your school? Please give number:

Machine	Number
Typewriters (Electric/manual)?	
Liquid Duplicator?	
Varityper?	
Addressing machine?	
Dictating equipment?	
Offset Duplicator?	
Rotary Calculator?	
Key-driven Calculator?	
Printing Calculator?	
Ten-key Adding machine?	
Full-key Adding machine?	
Bookkeeping machine?	
Accounting machine?	
Punched paper tape equipment?	
Punched card equipment?	
Photocopy machine?	
Others?	

2. Is this equipment owned by the school or rented?

3. What equipment is rented?

What equipment is owned? Please list in each case.

4. Does your school have an equipment replacement policy? Yes No

   If yes, what is the policy?

5. After how many years of use do you trade in your equipment (typewriters etc.) for new ones?

6. Does your school have a contract for machine repairs and maintenance?

   Yes No (Please elaborate)

7. What audio-visual aid equipment is available for use by the business education department? Please give number in each case.

   Visual: 1) Overhead projectors?
   2) Opaque projectors?
   3) Film projectors?
   4) Slide projectors?
   5) Others?

   Audio: 1) Dictating machines?
   2) Record players?
   3) Tape recorders?
   4) Others?

   Audio and Visual:
   1) Motion pictures?
   2) Television?
   3) Others?

8. Is the audio-visual aid equipment
   1) in each business education classroom permanently?
   2) elsewhere but in close proximity to the classrooms?
   3) some distance away from the classrooms?

Library Facilities

1. Is the business education department provided with a separate library?

   Yes No (Please explain)

2. Do you think the business education department is provided with adequate library facilities in term of:

   1) space?
   2) desks (or carrels)?
   3) books?
   4) periodicals?
   5) personnel?

   Give number where appropriate.

3. What business education periodicals does the business education department or the library subscribe to?

   Eg. Today's Secretary
   BEC Synoptic
   Cross-Canada Comment
   Pitmanite
   Business Education Forum

Community Relations

1. Is there community involvement in business education in your school?

   Yes No

2. If yes, what kind of community involvement?

3. Do you think the business education department should have greater involvement with the immediate community than the other departments

of the school (eg. academic)? Yes No

4. If yes, in what ways?

Guidance, Counselling and Job Placement

1. Does the school have a guidance and counselling department? Yes No
2. Who provides the guidance and counselling services to business education students?
    1) guidance and counselling department of the school
    2) business education department
    3) other
3. If the guidance and counselling services for business education students are provided by the school guidance and counselling department, in your opinion,
    1) is there coordination between the guidance and counselling department and the business education department?
    2) should there be improved and effective coordination between the guidance and counselling department and the business education department?
    3) is the present coordination between the two departments effective?
4. What major factor(s), do you think, influence(s) students' choice of business education courses/programs in your school?
    1) special aptitudes
    2) students' interest

3) parental influence

4) teacher influence

5) guidance and counselling department influence

6) other

5. Do the guidance and counselling services include assistance to business education students in finding jobs? Yes No

6. If yes, how?

7. Do the guidance and counselling services include follow-up studies of business education graduates? Yes No (please elaborate)

Problems

1. What current problems do you see in business education in your school?

APPENDIX II

INTERVIEWER'S GUIDE B

(Business Teachers)

Name of School:

Address of School:

1. Do you have a university degree? Yes No
2. If yes, what degree(s) do you have?
3. In what area do you have your
    (a) major
    (b) minor
4. What special business certificate(s) do you have for teaching business education subjects? Please list where appropriate e.g. bookkeeping certificate, business education certificate, typewriting certificate, accounting certificate, etc.
5. What class of teaching certificate do you have?
6. Approximately how many years of teaching experience do you have?
    (a) less than 5
    (b) 5 to 10
    (c) more than 10
7. Do you have work experience background in business or industry?
    Yes No
8. If yes, please elaborate by indicating the type of job and the number of years or months you worked at each: e.g.

Type of Job	Years/Months
Accountant	2 years
Typist	2 years

APPENDIX III

Department of Secondary Education
University of Alberta
Edmonton, Alberta
August 26, 1972

The Superintendent of Schools
County/Division/District
Town, Alberta

Dear Sir:

I am a secondary school teacher from Ghana, West Africa, pursuing graduate study at the University of Alberta. I was sent to Edmonton by my Government in 1968 to study business education so that upon my return I would be able to assist in the development of that area of instruction in Ghana.

For my M.Ed. thesis, supervised by Dr. Geraldine M. Farmer, Professor of the Department of Secondary Education at the University of Alberta, I have chosen to do a study of business education in the high schools of Alberta. I wish to determine the differences existing in certain specific aspects of business education among different sized high schools (small, medium, large) in the province.

To gather data for my study, it will be necessary that I visit selected schools to interview the principals, chairmen of business education departments and business education teachers. The topics covered in the interview will be as follows: student enrolment in business education, aims and objectives, curriculum, innovations, equipment and facilities, community relations, guidance, counselling and job placement, teacher qualification and instructional problems.

In your county/division/district, I have randomly selected ... high school(s) to participate in the study. May I have your permission to visit this (these) school(s) on ..., 1972. After receiving your approval, I would like to contact the principals to seek their cooperation in the study.

Yours sincerely,

James D. Quarshie

APPENDIX IV

Department of Secondary Education
University of Alberta
Edmonton, Alberta
September 13, 1972

The Principal
High School
Town, Alberta

Dear Sir:

I am doing research for my M.Ed. degree thesis under the direction of Dr. Geraldine M. Farmer at the University of Alberta, Edmonton. The purpose of the study is to determine the differences existing in certain specific aspects of business education among different sized high schools (small, medium, large) in the province.

To gather data for the study, it will be necessary that I visit selected schools to interview the principals, chairmen of business education departments and business education teachers. The topics covered in the interview will be as follows: student enrolment in business education, aims and objectives, curriculum, innovations, equipment and facilities, community relations, guidance, counselling and job placement, teacher load and instructional problems.

Among the schools I have randomly selected to participate in the study is your school, ... Permission to visit the school to gather data has been granted me by the Superintendent of Schools of County/Division/District. I now require your final approval.

May I have your permission to visit ... High School on ..., 1972 to conduct the interview?

Yours sincerely,

James D. Quarshie